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**CENSUS OF RHODE ISLAND, 1865.\***

By the settlement of the boundary question with Massachusetts in 1862, the profit and loss to Rhode Island in territory and population was as follows:

In Pawtucket, Rhode Island gained.....	6.939 miles and 4,200 inhabitants.
In East Providence "	12.5 " " 1,700 "
Total gain.....	19.4 miles and 5,900 inhabitants.
In Fall River, Rhode Island lost.....	1.12 " " 8,377 "
Net gain to Rhode Island.....	8.2 miles and 2,523 inhabitants.

It need scarcely be repeated that Rhode Island, the smallest State in the Union, is only 50 miles long and 35 miles in width, and that a large portion of this width is taken up by the waters of Narragansett Bay, which, extending inland for some 30 miles, divides the state into two unequal parts, leaving a land territory of only 1,054.6 square miles, with a shore washed by tide-water of 350 miles.

**1. PERSONAL CENSUS.**

The State is divided into five counties, and these contain thirty-three townships, five of which are situated on islands. The smallest town

\* Report upon the census of Rhode Island, 1865; with statistics of the population, agriculture, fisheries and manufactures of the State prepared under the direction of the Secretary of State, by Edwin M. Snow, M. D. Superintendent of the census. 1 vol. 800 p. 112.

(Warren) has only 4.7 square miles, the largest (South Kingstown) has 77.9 square miles. Below we give a table showing the area and population of the State by towns and counties:

Pop. to				Pop. to			
	Square miles.	Pop. u.s. n. miles.		Square miles.	Pop. u.s. n. miles.		
Barrington,	9.8	1,028	110.5	Burrillville,	53.2	4,861	91.4
Bristol,	10.8	4,649	451.3	Cranston,	38.7	9,177	272.3
Warren,	4.7	2,792	594.0	Cumberland,	33.6	8,216	244.5
Coventry,	58.6	3,995	68.2	East Prov.	12.5	2,172	173.7
East Greenwich,	17.1	2,400	140.3	Foster,	48.8	1,873	38.4
W. G'wich,	49.1	1,228	25.0	Glocester,	53.2	2,286	42.9
Warwick,	44.2	7,696	174.1	Johnston,	24.1	3,436	142.5
Jamestown,	9.5	349	36.7	North Providence,	15.0	14,553	968.8
Little Compton,	21.4	1,197	55.9	Pawtucket,	6.9	5,000	724.6
Middletown,	12.5	1,019	81.5	Scituate,	58.3	3,528	67.4
Newport,	7.0	12,688	1812.6	Smithfield,	73.3	12,315	168.0
New Shoreham,	10.5	1,308	194.5	Charlestown	39.8	1,134	28.6
Portsmouth,	23.4	2,153	92.0	Exeter,	54.0	1,498	25.8
Tiverton,	31.8	1,973	62.0	Hopkinton,	43.6	2,512	57.6
Providence City,	6.7	54,593	8148.5	Nort' Kings-town,	42.6	3,166	74.3
				Sout' Kings-town,	77.9	4,513	57.9
				Richmond,	33.9	1,830	47.0
				Westerly,	31.1	3,815	122.4

The area and population by counties is as follows:

Counties.	Area, square miles.	Pop. to sq. miles.
Bristol.....	24.3	8,469
Kent.....	169.0	15,319
Newport.....	116.1	20,687
Providence (including city).....	413.3	122,022
Washington.....	331.9	18,468
Total of State.....	1,054.6	184,965
		175.4

The density of population in Rhode Island (175.4 to the square mile) is higher than in any other of the United States. In 1865 the population of Massachusetts was 1,267,239, which gives 162.4 to the square mile. In the same year New York had 81.5, and New Jersey 92.9, to the square mile; but between these and Massachusetts, Connecticut having about 110 to the square mile, finds its position. The density of population in France is about the same as in Rhode Island. Prussia, Bavaria, Austria, Denmark, Scotland, Sweden and Norway are less densely populated.

The distribution of the population of course varies the density. The cities of Providence and Newport and the six towns, Bristol, Warren, Cranston, Cumberland, North Providence and Pawtucket containing only 117.9 square miles, but a population of 111,670 persons—11 per cent of the area, and 60 per cent. of the population of the State. If we deduct these from the total area and population, we find in the remainder of the State 936.7 square miles, with 73,295 inhabitants, or only 78 persons to each square mile. The seats of manufactures and commerce are denoted by their superior density.

The progress of the State in population is given in the following table:

Census of	Population.	Change.	Census of	Population.	Change.
1708.....	7,181		1800.....	69,122 + (10 years)	297
1730.....	17,935 + (22 years)	10,754	1810.....	77,031 + ( " )	7,909
1748.....	32,773 + (18 years)	14,888	1820.....	88,059 + ( " )	6,028
1755.....	40,414 + ( 7 years)	7,641	1830.....	97,210 + ( " )	14,151
1774.....	59,707 + (19 years)	19,293	1840.....	108,830 + ( " )	11,620
1776.....	55,011 - ( 2 years)	4,696	1850.....	147,545 + ( " )	38,715
1782.....	52,247 - ( 6 years)	2,664	1860.....	174,620 + ( " )	27,075
1790.....	69,825 + ( 8 years)	16,478	1865.....	184,965 + ( 5 years)	10,345

The movement by counties during the present century has been as follows :

Counties.	1800.	1810.	1820.	1830.	1840.	1850.	1860.	1865.
Fristol.....	3,801	5,072	5,637	5,446	6,476	8,514	8,907	8,469
Kent.....	8,487	9,884	10,228	12,783	13,083	15,068	17,303	15,319
Newport.....	14,845	16,294	15,771	16,535	16,874	20,907	21,896	20,687
Providence.....	25,854	30,869	35,736	47,020	58,273	87,526	107,739	122,052
Washington.....	16,135	14,962	15,687	15,421	14,324	16,430	18,715	18,468

The progress of the cities of Providence and Newport and the six towns before selected has been as follows :

Cities, &c.	1800.	1810.	1820.	1830.	1840.	1850.	1860.	1865.
Providence.....	7,614	10,071	11,767	16,836	23,172	41,513	50,666	54,596
Newport.....	6,739	7,907	7,819	8,010	8,333	9,563	10,568	12,688
Bristol.....	1,678	2,693	3,197	3,034	3,490	4,616	5,271	4,649
Warren.....	1,473	1,775	1,806	1,900	2,437	3,103	2,636	2,792
Cranston.....	1,644	2,161	2,274	2,652	2,901	4,311	7,500	9,177
Cumberland.....	2,056	2,210	2,653	3,675	5,225	6,661	8,339	8,216
North Providence.....	1,067	1,758	2,420	3,508	4,207	7,680	11,818	14,553
Pawtucket*.....	.....	.....	.....	.....	.....	.....	5,000	.....
Total.....	22,271	28,575	31,436	39,510	49,765	77,447	956,738	111,670

The rate of increase from census to census of the whole State and the two chief places, Providence and Newport, is shown in the following series of reductions :

	Cities				Cities		
	Whole State.	Providence.	Newport.		Whole State.	Providence.	Newport.
1790-1800.....	0.4	19.3	0.3	1830-40.....	12.0	37.6	4.0
1800-10.....	11.4	32.3	17.3	1840-50.....	35.6	79.1	14.8
1810-20.....	7.8	16.8	dec. 7.4	1850-60.....	18.3	22.0	9.9
1820-30.....	17.0	43.1	9.4	1860-65 (5 years)...	5.9	7.8	20.7

The increase in the cities from 1860 to 1865—in Providence 3,929, and in Newport 2,180, or together 6,109. The net increase in the towns above designated (not including Pawtucket) was 3,823. The total increase of the State was 10,345. Hence we find that nearly the whole increase has taken place within a very limited area. The agricultural parts of the State increase very slowly, and frequently retrograde. Washington County in 1790 had 18,075, and in 1865 18,468 inhabitants.

Among the facts deduced from the tabular statements accompanying the report the following are interesting.

There were 28,666 dwelling houses in the State 39,208 families, giving 1.4 families and 6.45 persons to each dwelling, and 4.72 persons to each family. In Providence there were 1.68 families and 8.06 persons to each house. There were 926 empty dwelling houses, of which 120 were in Newport, the census having been taken June 1, before the arrival of Summer visitors. Of the 28,666 dwelling houses in the State, 27,959 were constructed of wood, and only 432 of brick and 275 of stone. Even in Providence only 3.64 per cent. were of brick or stone.

More than one-half the colored population was found in Providence and Newport. The total number in the State was 4,087, being 135 more than in 1860, and forming 2.21 per cent. of the total population.

In regard to sex, there were in the State 8,439 more females than males. The proportion of the sexes were as follows :

White population.....	47.80	males, and	52.20	females in each 100.
Colored ".....	43.87	"	56.13	" "
White and colored.....	47.72	"	52.28	" "

\* Belonged to Massachusetts up to 1862.

Generally in New England there is, for obvious reasons, a large excess of females in the population, while in the newer States the opposite is true. In the whole country, in 1860, there was an excess of 730,000 males in a population of 31,000,000.

With regard to the nativity of the population the following facts are deduced. Of the 184,965 inhabitants of the State, 75,055 were born in the towns in which they resided, and 37,152 had migrated from the towns in which they were born to other towns in the State; the number of inhabitants born in the State and still living in it having been 112,207. Inhabitants born in other of the United States numbered 33,055, and those born in foreign countries 39,703. Every town in the State is represented in Providence, and nearly so in Newport. Natives of Newport are living in every other town except Gloucester. There seems, however, to be no special law governing migration within the State, except the tendency of the population of the smaller towns and farming districts to cities and manufacturing towns.

Every State in the Union, except Oregon, was represented in the population of 1865. The following compares the American *born* within Rhode Island in 1860 and 1865:

Natives of—	1860.	1865.	Natives of—	1860.	1865.
Maine .....	1,301	1,310	Connecticut .....	4,634	5,439
New Hampshire .....	1,452	1,082			
Vermont .....	692	748	Natives of New England .....	132,039	138,106
Massachusetts .....	13,965	17,320	" of other States .....	5,187	7,156
Rhode Island .....	109,965	112,207			
Total native born .....				137,226	145,262

The large increase of natives of Massachusetts in 1865 was partly owing to the annexation of Pawtucket and East Providence in 1862.

The foreign population of 1865 represented thirty different countries, and numbered 39,703 persons, making 21.46 per cent. of the total population. The proportion in 1850 was 15.66, and in 1860 21.41 per cent. The following shows the number of foreigners in the State in 1850, 1860 and 1865:

Natives of—	1850.	1860.	1865.	Natives of—	1850.	1860.	1865.
Ireland .....	15,944	25,285	27,030	Germany .....	230	815	897
England .....	4,490	6,356	6,478	France .....	50	123	146
Scotland & Wales .....	1,000	1,536	1,403	Portugal .....	58	86	75
British America .....	1,024	2,830	3,984	Other countries .....	25	263	290
Total .....					23,111	37,894	39,703

In the city of Providence the number of foreigners has increased but little for the last fifteen years, while the per centage has decreased. The Providence enumerations show the following:

Census.	Total populat'n.	For-ign.	p. cent.	Census.	Total populat'n.	For-ign.	p. cent.
1845 (city) .....	31,347	5,965	18.79	1860 (United States) .....	50,666	12,570	24.80
1850 (United States) .....	41,513	10,273	24.75	1865 (State) .....	54,595	13,492	24.54
1855 (city) .....	47,75	13,232	27.69				
Increase in twenty years .....					22,848	7,437	32.55

The Irish population comprised, in 1850, 68.99; in 1860, 67.61, and in 1865, 68.08 per cent. of the foreign born population of the city.

Taking the whole State together, we find that of the 145,262 classed as American *born*, 27,946 were the offspring of foreign parents. There is

also included among the native born 3,558 persons of mixed parentage, of which 1,759 had foreign-born mothers and 1,799 foreign-born fathers.

In every 100 persons there are 10.20 under 5 years of age; 10.91 between 5 and 10 years; 10.07 between 10 and 15; 10.06 between 15 and 20; 18.10 between 20 and 30; 14.36 between 30 and 40; 11.20 between 40 and 50; 7.67 between 50 and 60; 4.68 between 60 and 70; 2.09 between 70 and 80; 0.60 between 80 and 90, and 0.06 90 and over. Only two persons attained the century—Sylvia Whipple 102, and Hannah Gully 100, both living in Smithfield on June 1, 1865.

It will be observed that the number under 5 years of age is remarkably low. In 1860, the same class was 11.81, the decline being accounted for from the decrease of births on account of the war. But even this higher number is far below the average of the United States, which, in 1860, was 15.43. In Lower Canada the same class was, in 1852, 18.89 per cent. of the total population.

The report returns a good account of the educational status of the little State. The whole number of children between 5 and 15 years of age was 38,788, of which 33,774 were at school, leaving only 5,014, or 12.9 per cent. who had not attended school during the year. The highest rate of non-attendance was in the manufacturing towns, where the maturer portion of those of the school age were probably employed in the mills and manufacturing establishments. In these towns, also the foreign population chiefly reside, and among the lower classes of these many children are allowed to grow up in ignorance.

In regard to adult ignorance there were in the State, in 1865, 10,181 persons who could not read or write. Of these 15.24 (10.65 white and 4.59 black) per cent. were native born, and 84.76 (Irish 71.83, British 3.84, German 0.43, and others 8.66) per cent. were foreign born. A glance at these figures shows at once and unmistakably the source of the mass of ignorance unveiled, and indicates the direction in which efforts should be made for its removal.

Of 16,910 foreign male persons, only 1,260, or 13.4 per cent., have been naturalized under the laws; and of the whole number of the foreign born in the State (39,703), only one in 31.5 is the owner of real estate.

The number of (184,965) inhabitants of the State that enlisted in the army or navy, during the late war, was 7,521, or one in every 24.6 inhabitants. The number of males between 20 and 50 was 37,474, and hence the same enlistments gives one to every 4.9, or 20.1 per cent. This list includes only the soldiers and sailors of the State residing within its limits in 1865. Those who enlisted and did not return are not included.

The number of different occupations given by the census of 1865 was 348, and the number of persons whose occupations was given was 65,959. The occupations, in which more than 500 are returned, are as follows: blacksmiths 861, carpenters 2,457, clerks 1,927, dressmakers 692, farmers 10,754, (fishermen 497), grocers 631, jewelers 1,215, laborers 5,440, machinists 2,193, merchants 1,150, mariners 1,070, masons 767, operatives 13,604, painters and glaziers 708, servants 3,503, shoemakers 513, tailors and tailoresses 828, teachers 856, teamsters 692.

The productive force of the State is summed up as follows:

Products of agriculture.....	67,590,079
"    of fisheries .....	422,412
"    of manufactures .....	103,106,395

—making a total of \$111,118,886 per annum. This shows an annual production of \$601 for each man, woman and child in the State. This does not include the products of the whale and other foreign fisheries or other items, which are not found in the productions as reported in Rhode Island.

The agriculture and manufacturers of the State are also accounted for in the volume, but considering the length of the present article we are obliged to postpone any further notice of them to a future time.

Taking the work as a whole we have found it to be the best systematised census that has yet appeared, and we pronounce it highly creditable to its compiler, Dr. Snow, the erudite compiler of the well-known censuses of Providence for 1845 and 1855.

#### RAILROAD EARNINGS FOR MAY.

The gross earnings for the under-specified railroads for the month of May, 1866 and 1867, and the difference (increase or decrease) between the two periods are exhibited in the subjoined statement:

Railroads.	1866.	1867.	Increase.	Decr'se.
Atlantic and Great Western.....	\$451,477	\$459,370	\$7,893	\$.....
Chicago and Alton.....	339,851	338,691	8,840	.....
Chicago and Great Eastern.....	120,460	98,349	.....	31,011
Chicago and Northwestern.....	735,082	787,736	52,654	.....
Chicago, Rock Island and Pacific.....	325,110	251,916	.....	73,194
Cleveland and Toledo.....	210,783	180,675	.....	30,108
Erie.....	1,101,632	1,122,140	20,508	.....
Illinois Central.....	569,250	477,607	.....	91,643
Marietta and Cincinnati.....	95,664	90,526	.....	5,138
Michigan Central.....	365,196	333,952	.....	31,244
Michigan Southern.....	426,493	358,601	.....	67,892
Milwaukee and Prairie du Chien.....	297,488	119,104	.....	148,383
Milwaukee and St. Paul.....	245,598	230,497	.....	15,101
Ohio and Mississippi.....	283,130	232,939	.....	791
Pittsburg, Fort Wayne and Chicago.....	692,510	578,292	.....	104,218
Toledo, Wabash and Western.....	316,433	329,078	12,645	.....
Western Union.....	86,913	57,552	.....	29,061
Total in May.....	\$6,612,070	\$6,088,325	\$.....	\$524,745
Total in April.....	5,696,240	6,080,676	\$34,438	.....

The gross earnings per mile of road operated for the same month of the years, respectively, are shown in the following table:

Railroads.	Length in miles		Earnings		Differ'e-	
	1866.	1867.	1866.	1867.	Incr.	Decr.
Atlantic & Great Western.....	507	507	\$890	\$906	\$16	\$...
Chicago and Alton.....	280	280	1,178	1,209	31	...
Chicago and Great Eastern.....	224	224	538	400	...	128
Chicago and Northwestern.....	1,032	1,145	712	688	...	24
Chicago, Rock Island & Pacific.....	410	410	793	615	...	178
Cleveland and Toledo.....	173	1 3	1,218	1,044	...	174
Erie.....	798	775	1,380	1,448	68	...
Illinois Central.....	708	703	804	674	...	130
Marietta and Cincinnati.....	251	251	381	369	...	21
Michigan Central.....	285	285	1,281	1,172	...	109
Michigan Southern.....	524	524	814	684	...	130
Milwaukee & Prairie du Chien.....	234	234	1,142	569	...	633
Milwaukee and St. Paul.....	275	275	893	845	...	48
Ohio and Mississippi.....	340	34	833	833	...	1
Pittsburg, Ft. Wayne and Chicago.....	468	468	1,458	1,235	...	223
Toledo, Wabash and Western.....	521	521	607	631	24	.4
Western Union.....	177	177	491	327	...	16.
Total in May.....	7,207	7,297	\$947	\$834	\$...	\$83
Total in April.....	7,207	7,297	790	826	36	...

The above table shows that the gross earnings of the railroads specified

have fallen off in relation to the gross earnings in May, 1866, to the extent of \$83 per mile operated, which is equal to 9.05 per centum. This presentation of a month's business would be a serious matter not only to those most intimately interested in the several lines, but also to the public generally, were the results shown, either a measure of the business transacted or of the net proceeds of that business; but that they are either the one or the other cannot be admitted, the decline in the amount being the natural effect of the same causes which have operated in reducing prices in every department of business, and do not therefore necessarily show a falling off in *net* earnings.

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#### ON THE COLLECTION OF REVENUE.

(Continued from page 451, Vol. 56.)

One of the great articles of production of Pennsylvania is wheat; the annual value of her wheat is more than the annual value of all her iron and its manufactures. In Pennsylvania, nature has indicated that wheat and other grain would yield the largest result for the least labor, and that grain should be the chief product, until such time as the general supply had become so great as not to yield so large a return for the labor employed as would come from working her vast deposits of iron.

At the time Pennsylvania was settled, England had already established iron works, because Nature had indicated iron as one of the natural products of England, by placing there great beds of coal and iron, and but a comparatively small area of arable land.

The farmer of Pennsylvania wants iron, which exists in its crude form under his own farm. England wants wheat. Let us suppose that, under the circumstances as they are in Pennsylvania, the farmer of Pennsylvania can produce a ton of wheat with twenty days' labor and a ton of iron with thirty days' labor, and let us suppose that, under the circumstances as they are in England, the Englishmen can produce a ton of iron with twenty days' labor but it takes him thirty days' to raise a ton of wheat.

The Englishman wants wheat, and the Pennsylvanian wants iron; exchange is free and the barter is made. It is not necessary to express the exchange in money. It is so many days' labor against so many days' labor. The desires of both are satisfied by an aggregate of forty days' labor, resulting in a ton of wheat and a ton of iron—each where it is wanted. The element of transportation may be omitted, as the same conditions apply to Canada and the United States, which are only divided by an imaginary line.

But now comes in the Government of the United States and claims a portion of the labor of the Pennsylvanian—say six days, and each day's labor is measured in Pennsylvania by one dollar. The Government imposes a duty of six dollars on a ton of iron. But as the ton of iron would cost the Pennsylvanian thirty days' labor, or thirty dollars, he will still give twenty days to wheat, six days to the Government, and import his iron. The Englishman will still expend twenty days on iron and exchange it for wheat.

The desire of the Pennsylvania farmer for iron, of the Englishman for

wheat, and of the United States Government for \$6, will all be satisfied by an aggregate of forty-six days' labor.

But the great iron resources of Pennsylvania are not protected; they must be developed, and the Government is induced to put a protective duty of \$12 on a ton of iron: but \$12 represents twelve days' labor for the Pennsylvanian, who wants iron, and therefore it is better for him to give thirty days to making a ton of iron, rather than twenty to wheat, and twelve to the tax. He does so, and gets his iron. The Englishman, having no market for his iron, and wanting wheat, must give thirty days to raising a ton of wheat. The desires of the Englishman and of the American are both met by an aggregate of sixty days' labor. But the United States has no revenue; it wants \$6, but, having been deluded into imposing a protective tariff, it did not get it, and must now impose a direct tax on the Pennsylvanian equal to six days' labor. The three desires are therefore satisfied only by an aggregate of sixty-six days' labor. To sum up:

The Revenue Tariff satisfied the three desires with.....	46 days.
The Protective Tariff with.....	66 "

Waste of labor.....	20 days.
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Disregarding all comity with the Englishman, the Pennsylvanian's desire is satisfied.

And he pays \$6 tax to the Government, under a Revenue Tariff, with.....	26 days.
Under the Protective Tariff, with.....	36 "

Waste of home labor.....	10 days.
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Any one who has read Prof. Perry's admirable book will see that I owe this demonstration to him.

If we wish to understand how the great iron deposits of Pennsylvania would be developed in a natural manner, we have to take the case in a little different form. Suppose twenty men working one day can make a ton of wheat and thirty men a ton of iron; with free trade, ten men have leisure—ten men are unemployed on wheat. Will they not be sure to be trying experiments on the iron which they want? Will they not slowly but surely learn the trade? But, if the whole thirty men are forced by protection into making iron without ever serving an apprenticeship at it, are they as likely to achieve success?

Let me suppose another extreme case: I am a farmer in St. Lawrence County, N. Y., understanding my business; and with one day's labor I can produce a bushel of wheat; in three days' time I, not having learned the trade well, can cobble together a pair of shoes with great waste of leather. On the other side of the river is a poor, ignorant cobbler sent out from England and placed upon a Canada farm; he can make my shoes in a day, but he requires three days to make a bushel of wheat wherewith to feed his family. Shall I not be protected against pauper labor? If I allow his shoes to cross the river, shall I not be reduced to his level? Shall I ever learn shoe-making and become independent of these foreigners who flood us with their shoes, unless Government compels me to employ three days of hard work on shoes, instead of two days of leisure in cutting up leather and trying to learn at my ease.

But suppose this cobbler moves one mile and comes into the United States—in what respect has his labor changed in its relation to mine? As a consumer he now pays a small portion of the United States taxes, which he must add to the price of the shoes he makes, in precisely the same manner as a moderate revenue duty would have been added to the price of the shoes if he had continued to make them in Canada; do I any longer demand such a tax upon the shoes made by him as shall force me to make them myself? Far from it, I scout the idea of a heavy tax on shoes, and hasten to avail myself of the benefit of his cheap labor; yet in England or in Canada he was a pauper, or so near it as to be called so.

To be consistent in the doctrine of protection to American labor, we should impose the very highest rate of duty in our schedule, upon the laborer, and not upon his product; we ought not to permit this flood of immigration; the immigrants can make great many things which we can make ourselves. Let this duty by all means be *ad valorem* and on a home valuation, so that we may as far as possible exclude the most skillful and intelligent workmen; we don't want the result of their skill when it is exerted abroad, and we shall never prosper if they come here and prevent our attaining it ourselves.

There is danger in the abundance of things. We are flooded with foreign commodities—flooded with comforts and luxuries. Protect us, in order that we may labor: it is a privilege to labor; we want to work harder, to get what we consume, than our natural condition requires. Create an artificial scarcity, so that we may enjoy our full right to labor.

Is it the right to labor for which we should so strive? Is labor the end? Is it not rather what labor will give us that we seek? And if we can get what we want with little labor, instead of much, do we regret it?

“But,” says the protectionist, “you will never establish manufactures unless they are protected in their infancy.” I believe all baby-jumpers and other devices to aid or protect children in their efforts to walk have been discarded, as it has been found better that they should now and then have a tumble, and possibly one occasionally break its neck, rather than that all should grow up with weak legs, even though their legs should get as strong as they ever would have been by the time the children have become old men. And I believe the same process is healthy for infant manufactures as well as for infant children. The most firmly established manufactures in the United States are those which have never been protected to any extent—such as the various manufactures of wood; of boots and shoes; of heavy machinery, such as locomotives; and, above all, of agricultural implements and tools, of clothing, of sewing machines, and so on, to the extent of the larger part of our home manufactures, some of which have grown up in spite of heavy duties on the raw materials of which they are composed. It may here be well to consider the meaning of the terms “raw materials” and “manufacturing.”

In the common use of the words, raw materials are things which are produced mainly by hand or manual labor, and are therefore true manufactures; but which are changed into finished commodities, not by the hand, but really by machines. We are led to much confusion of ideas by this inaccurate use of words.

We call cotton a raw material, yet to the planter it is a finished commodity, produced by the hand labor of the cultivator of the field, and finished upon the cotton gin.

To the so-called manufacturer, the cotton comes from the gin as a raw material, and in the mill it becomes finished product, as cloth.

But, as cloth, it now goes to a real *manu-facturer*—the sempstress, to whom the cloth is raw material, and who by hand cuts it and makes it into garments; and the garment is now a finished commodity.

But, as a garment, it goes to the farmer, to whom again it is a raw material, by means of which he is enabled to live in comfort, and without which he could not cultivate his farm. It does not cease to be a raw material and become a *finis-hed* commodity until it is worn out; and even then it becomes the raw material of the paper-maker, and may not reach its final end until it has printed upon it an essay “upon the Collection of Revenue,” and is put away upon a library shelf.

In its course, whom shall we protect or give a bounty to?

The manufacturer of the raw cotton?

The manufacturer of the cloth?

The manufacturer of the garment?

The consumer of the garment?

The paper-maker? or, finally—

To the writer of an essay “upon the Collection of Revenue”—who may, at this present moment, really need *personal protection* more than any other?

Shall we not rather seek to collect our revenue as impartially as possible, creating no artificial obstacles to commerce, and leaving each individual to work out his own material salvation, even as he works out his spiritual salvation?

This claim for the protection of infant manufactures never ceases. Under its operation they never seem to grow to manhood, but the larger they grow the more urgent the demand for artificial support. The most urgent and imperative demand for protection now comes from the iron-masters and the wool-growers.

American iron was born into the world more than a hundred years ago, when Pennsylvania was a colony. Great Britain was the mid-wife who presided at the birth, and endeavored to strangle the infant in its cradle; but he, being of a tough and fibrous quality, lived and grew apace, until he could stand alone, if he would only think so. But having been propped up with baby-jumpers and crutches, shoulder-braces, etc., he fears to stand lest he should fall, and demands now to be encompassed with a high wall over which no rude shove shall reach him.

Where the demands of Pennsylvania ever more imperative? Yet what are the facts.

In the fiscal year ending June 30, 1866, a year of very large importations, the total import of iron and steel, and the manufactures thereof, was a trifle over.....	19,000,000
The export of iron and steel, and the manufactures thereof, allowing two-thirds the value of the agricultural implements and printing presses to have been iron and steel, was about.....	5,000,000
Leaving a net import of.....	14,000,000

During the same period, the internal revenue derived from iron and steel of home manufacture, in the forms which are specifically named by law, amounted to \$13,728,133.

The internal taxes alone upon this *infant* home manufacture were nearly equal to the total value of the importation.

It is somewhat difficult to capitalize this tax, as the taxes upon iron and steel were duplicated, and even in some cases quadrupled, but the total value on which this tax was assessed cannot have been less than \$200,000,000, and was probably nearer \$300,000,000. The object in demanding a heavy duty on iron and steel, or any other commodity, can only be to maintain the price in an amount equal to the duty imposed. The demand of Pennsylvania is that the duties shall be raised to a still higher point than they now are, in order to shut out the flood of \$14,000,000 worth of foreign iron, by granting a bounty on over \$200,000,000 of home production. We may well ask Pennsylvania how much longer she will "plead baby?"

I shall perhaps be charged with ingratitude by some of my friends in Pennsylvania, and I might have felt obliged to take another illustration rather than iron, had it not been for the most unreasonable demand of Pennsylvania for a duty on bituminous coal. If not infants in iron manufacture, the men who advocate this duty are infants in intelligence. Suppose New England being without coal, and being obliged to use costly fuel, were to demand that a tax be imposed upon every steam engine used out of New England, and that her own should be exempt; would there not be an outcry which would overwhelm us with scorn and derision? Should we not be charged with the most selfish designs? Yet such a claim would be far more reasonable, than that of Pennsylvania for a duty on coal, which is only a tax on the steam engines of New England, already working at a disadvantage. The impudence of this claim is only exceeded by the ignorance of all economic law exhibited by those who propose it, which ignorance is their only justification.

It is alleged that because we have begun the manufacture of Bessemer steel rails in this country, the price has been reduced by the English manufacturers from \$150 to \$110 per ton, or about in that proportion; but those who make this absurd allegation make no note of the enormous extension and improvement in this manufacture in England. If their allegation is true the trade in steel rails in England would be conducted in the following manner. Suppose the parties to be the English manufacturer, the Agent of the Pennsylvania Central Railroad, and the Agent of the Pacha of Egypt.

Penn. Agent.—What is the price of steel rails?

Manufacturer.—For what railroad?

Penn. Agent.—For the Pennsylvania Central.

Manufacturer.—The price is \$110 per ton, delivered.

Agent of the Pacha.—I want an equal quantity at the same price.

Manufacturer.—Our price for Egypt is \$150.

Agent of Pacha.—Have you two prices?

Manufacturer.—Yes, sir; they are endeavoring to establish the manufacture of steel rails in Pennsylvania, and all the English manufacturers have combined to break them down; we charge \$110 to Yankees, and \$150 to all others.

Agent of Pacha.—But you make a profit at \$110.

Manufacturer.—Oh, yes, certainly: we don't make a practice of selling at less than cost.

Agent of Pacha.—Good morning, sir; I will get my rails in Prussia, or wait until the Americans get started. If you make a profit at \$110, and charge me \$150, Pennsylvania will soon supply me at less than \$150, even if you supply her own railroads at \$110.

I believe that any business man must see that the alleged effect of the few small steel-rail establishments in this country is as nothing compared to the effect of the competition in England. We cannot cripple our whole railroad system, cause all our transportation to be more costly, and retard the development of our western country, by granting any higher bounties to a few rail-makers, than we now pay. Yet I do not ask Pennsylvania to cease at once to demand duties upon iron and steel, nor would I willingly submit at once to a great reduction in the duties upon cotton manufactures. Any such abrupt changes would destroy capital and reduce production.

Our problem is to maintain capital, and increase production, and this can only be done by a judicious reduction or abatement of internal taxes, and then by a gradual reduction of duties; and I for one have always advocated the entire abatement, first and before all others, of the internal taxes upon metals and the manufactures of metal. The metals are at the foundation of all other industry, and any tax upon them is an impediment to the production of almost every commodity needed by men. It is to be hoped, that, whatever Congress may fail to do in the matter of amending our present onerous tax laws, they will not fail to abate all internal taxes upon metals, and the manufactures of metal, and to refuse all requests for an advance in the duties.

The repeal of the cotton tax should immediately follow, if it should not precede. This tax was never justifiable, except as a temporary expedient; the least onerous method would have been to have collected it of the manufacturers for the home consumption, and of the merchants at the port of export. To attempt to collect of the producers checks the change from the plantation to the small farm system, and checks production. It may be added, that the time is not far off, but will come probably within two or three years, when there will be a surplus of cotton in the world. (See appendix C).

I think Boston to-day affords a good illustration of the evils of protection. The conditions of soil, climate and coast, indicated maritime pursuits as the province of New England men; and she engaged in them chiefly until the South forced a protective tariff upon the country. As this destroyed commerce, New England developed textile manufactures before their time, and then, becoming converted to the doctrine of protection, continued to foster them by the same process. The result is, that a large amount of the capital, and a large amount of the business capacity of Boston which should have been applied to railroads, steamships and commerce has gone into manufactures; consequently, Boston commerce declines, and young men emigrate. Commerce would have employed the young men at home, or in voyages ending at home; but textile manufactures employ only a few treasurers, agents or commission merchants, and a very large force of operatives or laborers. There are too many young men for the number of places equal to their capacity, and they must migrate. I think the population of New England has not been improved by this forced establishment of textile manufactures.

If, as I have attempted to demonstrate, a tariff is but a tax under another name, then it is a burden upon the labor of the country, and is subject to precisely the same law as an internal tax.

I now come to another point to which I have adverted, viz., that in the collection of a given amount of revenue, more or less evil could be done, according to the wisdom or unwisdom of the law. Nations which are older than ourselves in the matter of taxes, select certain articles to bear the heavier portion of the burden, rather than lay an even portion on all. It is an axiom, that the consumers pay all taxes in the long run; but this should always be qualified by adding, that their consumption of taxed commodities is regulated by their production. The great body of consumers and the great body of producers are identical, and they procure the taxed articles which they consume in exchange for the articles they produce.

The articles thus selected for taxation are tea, coffee, sugar, spices, spirits, tobacco and other commodities, the consumption of which is voluntary, and the deprivation of which does not impede production. None of the articles named are essential to production, in the sense that meat, bread, iron and clothing are essential; and therefore the consumer may use a little more or less, according to the price, and still cultivate as many acres or operate as much machinery. England keeps her custom-house because tea, coffee, sugar and spirits are natural subjects of taxation; but, if they were all produced in England, she would tax them by an excise duty at the same rate, and abolish her custom-house.

But now let us see if we really limit the power of the consumer to purchase tea and coffee, by a high duty on them, and no duty on iron, rather than by a moderate duty on each. Let us return to the Pennsylvanian and the Englishman, and remember the relative condition of labor on iron and wheat.

Let us suppose that each was employed the whole year, save thirty days, in feeding and clothing his family, and has just thirty days to give to accumulating a surplus of capital. The Englishman, for some reason, desires to have, as the representative of his surplus labor amounting to thirty days, a ton of wheat, which he can make in thirty days; but he can make a ton of iron in twenty. The Pennsylvanian must have a ton of iron, which he can make in thirty days; but he can make a ton of wheat in twenty. By free exchange, each can satisfy his desire with twenty days' labor, and each will thus have ten days to spare.

Wanting tea, each will work upon some commodity to exchange for tea. We will say that the Pennsylvanian wants five pounds of tea, and with five days' work can get it free of duty; the Government puts a duty on tea equal to five days more, but the Pennsylvanian still has five days to spare and works it out. He has his ton of wheat, his five pounds of tea, and has paid five days work or five dollars to the Government. But, under a system of protection to iron, by which the Pennsylvanian has been caused to give thirty days to iron, he has only the iron; he has no tea; the Government has no revenue, and must now take a part of his ton of iron.

Free exchange of the results of labor, free trade, free commerce, gives to each nation the advantage of the different gifts of soil and climate which God has bestowed upon the several sections of the earth. It in-

creases the abundance of the things which give comfort or enjoyment to all people. It does not degrade the labor, or reduce the purchasing power of the wages in the most favored country, like our own; but, while it would yield to us more comfort and more luxury, it would elevate the oppressed of other nations and civilize the barbarian.

The individual laborer, who is skilful in farming, or well placed on good land, and whose wages are high because his product is large, does not give up his occupation and go to making shoes because some poor shoemaker near him is starving and willing to work cheap; then why should Uncle Sam, with his rich farm, and his domain, scarce touched by the hand of man, refuse to employ the pauper labor of Europe, of which we hear so much, because the paupers work cheap?

Much of this hue and cry about pauper labor is merely clap-trap, the pauper labor of England is mainly in the agricultural counties. Of the same nature is the common talk about the flood of foreign commodities with which we are overwhelmed. Let any one analyze the imports for the year 1866, and out of \$368,000,000 on which duties were paid he will find less than \$68,000,000 consisted of articles of luxury, and over \$300,000,000 were articles of comfort or of necessity. It is alleged that the total value of all our products in the year 1866 was \$6,000,000,000; and it is tolerably well ascertained that the value of all our products in 1860 was \$4,000,000,000, on a gold basis. If the estimate for 1866 is correct, then our flood of foreign luxuries was about equal to one per cent on our production!

Upon the third premise, which seems to me fundamental, viz, that gold and silver, either in the form of bullion or money, are only useful up to a certain amount, which will define itself, if let to natural laws, I shall spend but a moment.

Gold and silver, or specie money, has been adopted by the world as the measure of value of all commodities, and, being an article of universal desire, it has value in relation to other commodities in the proportion which the labor required to mine, smelt and refine the specie bears to the labor required to produce the other commodities. Now if the exchange of all other products of labor be left free, except so far as the need of revenue causes a tax to be imposed upon the so-called natural subjects of taxation, then the exchange of specie as one of the products of labor must be left free also, and it will follow the natural law, remaining where it is wanted most. The country which continues to use it as a measure of value will want it more than the country which has substituted paper as measure, or wampum or cowrie shells, or any other substitute which ignorance or necessity may devise, and the country which wants it will get it because it will give more of other products of labor for it, unless those products are prevented from entering the country which has the gold. If importations are prohibited or retarded, then gold remains in the country unnaturally, and causes an advance in prices the same as an issue of paper money. If we could prohibit imports absolutely, and continue to mine \$100,000,000 of specie a year, its value in this country, in relation to other commodities, would, of course, be far less. This was done in Japan. Japan produces gold, but, by non-intercourse, it had so accumulated it as to cause it to lose a part of its purchasing power, or relation to other products; and the first outside barbarians who opened

trade with Japan, obtained much more gold for their commodities than they could have got elsewhere.

We can take the same position in the world as Japan, if we inflate our currency and prohibit imports; but our gold will then have no value except in the arts, as paper can be made with less labor than gold can be mined.

Taxation of any kind is surely a burden, but it has its compensation. The desire to live as comfortably, or, in other words, the desire to produce as much for one's own use, despite all taxes, stimulates invention; and every invention, by increasing the productive force of the laborer, increases the result. The invention of improved agricultural machinery kept our crops increasing all through the war, and I suppose we can now produce as much more than we formerly could as would suffice to pay all the taxes without using any more effort or expending any more hours of labor in the aggregate; but the trouble is, the increase is not equitably divided, and cannot be under our present system of currency: therefore the burden presses more and more upon the mass of the people, and will continue to do so until the proper correctives are applied.

Now as to the correctives. The first essential thing to be observed is not to make any rapid change. Because it would have been better to have collected the revenue from what I have called the natural subjects of taxation at the beginning and up to the present time, it by no means follows that we should jump to that system at one bound.

Our industry has been diverted from its natural channels by protection, and we must slowly and cautiously guide it back, else we may all be paralyzed. We need the immediate establishment of a permanent board of Commissioners of Revenue, consisting of at least five competent men, secure in their tenure of office, well paid, and selected because of their fitness and ability. Mr. Wells alone, with work piled upon him which five men could not have accomplished in the very best manner in the time given, has yet made a report of inestimable value, and such as was never presented to the country before.

A permanent board, known to have the matter of revenue in charge, would take it mainly out of party politics. The people could not afford to have it trifled with. The Board of Commissioners would prepare changes and give fair warning, thus giving each branch of industry time to prepare, and preventing disaster.

Slowly, but surely and safely, can this country be brought to a system by which it shall secure an ample revenue from almost as few articles or interests as are now taxed in Great Britain. If any one doubts this, let him consider. We have now, as I suppose, a larger population, and though not as much accumulated capital, yet, what is more valuable, a better educated people, and a country whose resources have hardly been touched, and whose productive capacity may be indefinitely increased. Can any one doubt that a given number of hours of American labor will yield a larger result than a given number of hours of English labor? Aggregate all the American laborers into one, and all the English laborers into one. Put the Yankee education and the Yankee versatility, and the innumerable labor-saving devices of the Yankee, and also the varieties of our soil and climate, against the great works and mills, and greater accumulated capital of the Englishman, and which would get the greatest

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result for his labor? I think every one here will honestly answer, The Yankee.

Then he will consume more tea and coffee and sugar and spirits and spices, and have a greater income, and require more stamps to represent more transactions, than the Englishman; and, consequently, the same rates of tax upon these various items will pay our larger rate of interest, but our less cost of army and navy and civil service, and pay our debt besides as rapidly as it should be paid. We are paying debt too fast now. The faster we try to pay at the beginning, the longer we shall be in paying the whole.

The Secretary of the Treasury estimates the expenses of the Government, for the fiscal year, ending June 30, 1868, as follows, in round numbers:

Civil service.....	\$50,000,000
Pensions and Indians.....	25,000,000
War Department.....	50,000,000
Navy.....	30,000,000
Interest.....	135,000,000
 Total.....	 290,000,000

We may soon reduce the expenses of the War and Navy Departments to an aggregate of \$50,000,000, and ought to increase the interest to \$150,000,000 by funding the legal tenders. The estimate would then stand:

Civil Service, Pensions and Indians.....	\$75,000,000
War and Navy.....	50,000,000
Interest.....	150,000,000
 Add for reduction of debt.....	 25,000,000
 Total.....	 \$300,000,000

Population increases by births and immigration more than three per cent per annum on the average, but production increases in a much greater ratio; and rates of taxation so adjusted as to yield \$300,000,000 now would doubtless yield \$400,000,000 within ten years. The expenses of the Government would doubtless increase, but, in the absence of war, not more than the saving of interest on the debt annually paid would amount to.\*

\* If consumption should only increase at the rate of three per cent per annum, the rate would, in ten years, cause the avails of taxes to be about thirty per cent more. The rates of taxation, which would now give \$300,000,000 would then give \$390,000,000.

If consumption should increase five per cent per annum, that rate would yield in the tenth year about \$450,000,000.

If we allow an increase of consumption at the rate of five per cent per annum, the following sums would be available in each year for the payment of debt, and in this estimate I allow a present need of \$300,000,000, and that our expenses shall increase

Let us now see how near we have already come to securing the sum of \$300,000,000, from the sources from which revenue can be derived with the least injury.

In the fiscal year ending June 30, 1866, the taxes imposed, either under the Tariff or Internal Revenue Laws upon the following articles of interests: Incomes, Stamps, Licenses, Banks and Insurance Companies, Legacies and Successions, Gross Receipts of Railroads, Canals, Lotteries, Telegraph Companies, etc., Tea Coffee, Sugar, Spices, Spirits and Wines, Fermented Liquors, Tobacco, and Manufactures of Silk, amounted to about \$260,000,000, of which over \$80,000,000 was in gold from the Customs.

The Income tax will be reduced by being made uniform, but the tax on spirits will be increased by the enforcement of the law, it having been over \$37,000,000 in the calendar year ending Dec. 31, 1866, against \$29,000,000 in the fiscal year ending June 30, 1866.

It may be alleged that this year yielded more than an average, and there is some force in the objection; but, if we remove the internal taxes on iron, steel and on manufacturing generally, that is if we remove the impediments to production, I believe the consumption of tea, coffee, etc.,

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as fast as our interest decreases, or that we shall only decrease debt by the amount we get over \$300,000,000.

Year	per cent	Year	per cent
1st on 300,000,000, 5....	\$15,000,000	12th on 300,000,000, 60....	\$180,000,000
2d " 10....	30,000,000	13th " 65....	195,000,000
3d " 15....	45,000,000	14th " 70....	210,000,000
4th " 20....	60,000,000	15th " 75....	225,000,000
5th " 25....	75,000,000	16th " 80...	240,000,000
6th " 30....	90,000,000	17th " 85....	255,000,000
7th " 35....	105,000,000	18th " 90....	270,000,000
8th " 40....	120,000,000	19th " 95....	285,000,000
9th " 45....	135,000,000	20th " 100....	300,000,000
10th " 50....	150,000,000		
11th " 55....	165,000,000		\$3,150,000,000

Or in less than twenty years the whole debt will be paid, and we should have \$500,000,000 to spare to build two or three Pacific Railroads, a ship canal across the Isthmus of Darien, and a few more works of the like character.

If we allow an increase of the results of taxation at the rate of the increase of population, say only at three per cent, and allow \$300,000,000 as the constant amount required for expenses and interest, we have the following result:

Per cent	Year	Per cent	Year
3 on 300,000,000, 1st....	\$9,000,000	3 on 300,000,000, 14th....	126,000,000
" " 2d....	18,000,000	" " 15th....	135,000,000
" " 3d....	27,000,000	" " 16th....	144,000,000
" " 4th....	36,000,000	" " 17th....	153,000,000
" " 5th....	45,000,000	" " 18th....	162,000,000
" " 6th....	54,000,000	" " 19th....	171,000,000
" " 7th....	63,000,000	" " 20th....	180,000,000
" " 8th....	72,000,000	" " 21st....	189,000,000
" " 9th....	81,000,000	" " 22d....	198,000,000
" " 10th....	90,000,000	" " 23d....	207,000,000
" " 11th....	99,000,000	" " 24th....	216,000,000
" " 12th....	108,000,000		
" " 13th....	117,000,000		\$2,702,000,000

or more than the entire debt in twenty-four years.

the use of stamps and the aggregate of incomes, would increase; at any rate we could safely count on \$250,000,000 from such sources. In confirmation of which opinion see the letter of Hon. D. A. Wells hereto appended.

If we can get \$250,000,000 from these sources, we should have but \$50,000,000 left to obtain from all other foreign imports; but to reduce the duties thereon so as to yield but \$50,000,000 would be too abrupt a change—it would be better to raise \$75,000,000. The latter sum would probably be yielded by a tariff at about the present average rate of forty-eight per cent, less twelve to fifteen per cent reduction, as the equivalent for the reduction in internal taxes—say by an average rate of duties of thirty-three and a third per cent. Such rate would really give as much protection to home industry as the present tariff, if home industry is relieved from the present onerous internal taxes. There are few textile manufacturers, or none, who would not say that a net duty of thirty per cent on foreign imports would be better for them, with the internal taxes removed, than the present high rates of duty are with the internal taxes as now imposed.

To this practical agreement I believe New England manufacturers would come. The protectionist would say, twenty-five to thirty per cent net duty gives us all we want; and the free trader would say, We advocate for the present twenty-five to thirty per cent net duty for the purpose of obtaining revenue. The result is the same, but it is of the utmost importance that we start from the free trade rather than the protective point of view. The free trader cannot be swerved from a uniform system, because he looks upon the whole thing only as a necessary evil; but the protectionist is constantly in danger, because he thinks he can confer a benefit and is therefore at the mercy of each special interest.

Hence the futility of the attempts to pass a tariff bill at the two last sessions of Congress. Each man put in his brick, until the whole structure became absurd and ridiculous, and at last it all tumbled to the ground together.

When the Committee of Ways and Means shall frame a moderate tariff, as a revenue measure, upon a fixed principle, firmly assuring the representatives of each special interest that they must adjust themselves to it as best they may, it will be very certain that the common sense of the people will compel the enactment of the law thus framed.

The question of protection has been much complicated, during the late sessions of Congress, by the claim made by the Western and Middle States for protection to agricultural products and upon materials in their primary or secondary condition, such as copper ore and regulus, raw and lined flax, hemp, jute, linseed, hides, goat-skins, salt, etc. It would seem as if the West had suddenly come to the conclusion that New England, by means of protection to manufactures, had been making money out of them, and that it was time for them to get a return from New England.

I cannot deny that if New England has derived benefit from the bounty granted under the name of protective duties, which I doubt, so far she has prospered at the expense of the rest of the country. I do utterly deny, however, that this special benefit has been intentionally secured by the advocates of protection. They have, and do still earnestly believe, that protection is a benefit to the whole community, and that their own

gain is but a proportional part of the general gain. I think, however, they will find it somewhat difficult to meet the claims of the Western men, if they adhere to the doctrine of the expediency of protection; and that such is actually the case, is proved by the recent combination of the wool growers and the woolen manufacturers.

The wool growers' claim has been admitted, and a protective duty has been placed upon foreign wool. This claim might have been presented in a much stronger manner than it has been. The wool growers might have said to the manufacturers, "You advocate protection to American labor, and insist that you are its representatives because you are manufacturers: your claim is well grounded. American labor should be protected, and, if this is to be secured by protection to manufactures, we are the real manufacturers. Nature has given such conditions of climate and soil to Ohio that to make wool we must *with our hands* build fences and barns, and cultivate the land, and also shear the sheep. Our wool is manufacture; and, in numbers, we, the agriculturists, are greater than those who operate your machinery.

The manufacturers of woolen fabrics must admit the claim, and they have done so. The result is a higher bounty to each of these interests.

The claim of the wool grower cannot be met by an advocate of the principle or expediency of protection, but can be easily controverted by the advocate of free trade. What is the claim of the wool grower of Ohio but this, that he shall substitute human labor for the free sunshine which nature has given to South Africa, to Syria, and to South America; and that the community who use wool in the form of woolen garments must be made to pay for such useless labor.

The wool of South Africa and South America may be said to represent four parts sunshine and soil, gratuitous and common to all, to one part of human labor measured at the rate of twenty-five cents per day. The wool of Ohio represents, on the contrary, two parts of sunshine and soil, to three parts of human labor measured at the rate of \$1 per day.

Protection to wool is only an artificial impediment by which we shall be prevented from enjoying the large bounty of nature with which God has endowed South Africa in this one respect. We refuse it, because it is gratuitous and common, and, as a nation of 36,000,000, we charge ourselves with a bounty for the possible benefit of half a million interested in wool growing.

Bastiat's satire, in the form of a petition of the candle-makers and tallow-chandlers of Paris to be protected against the light of the sun, by having all the windows closed, and the streets roofed over, is not more absurd.

On the other hand, can the manufacturer of woolen cloths and other fabrics substantiate his claim to protection? He has no greater claim to a bounty; and has, at this time, only a right to be spared the disaster which a sudden change in the revenue policy would cause.\*

To the advocate of a revenue tariff, from the free-trade stand-point, the

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\* Such disaster as overwhelmed the manufacturers of worsted goods, when by the sudden, and as I believe most unwise abrogation of the Reciprocity Treaty, the coarse Canda wool, which had been free, became subject to a heavy duty.

problem is perfectly simple. His ground is this. If we had no expenses, we should need no revenue, and our industry would assume that exact measure of diversity which our soil and climate indicated, and the intelligence of our people rendered possible. Our true prosperity would consist in the abundance of the commodities which we desire and use, and not in the amount of money by which we measure them. Our laboring people would secure the most comfort and the most rapid progress, not by high wages—the result of an artificial scarcity—but with low wages and a natural abundance of commodities.

But we must have a revenue; how shall we obtain it? Free trade and direct taxation we almost unanimously reject, and protection we equally reject.

Should we not then first tax such articles as are not of prime necessity—such as tea, coffee, sugar, liquors, spices and silk goods; next, the interests which are the farthest removed from labor—such as licenses, incomes, stamps, banks and the like?

When we have exhausted these sources of revenue, should we not rather levy a duty upon such commodities as represent the larger amount of human labor, skill and invention, and the lesser amount of the gratuity of Nature?

Wool, hemp, jute, cotton, copper, ore, salt, linseed, hides, skins and the like represent commodities which are the product mainly of Nature, supplemented by a small degree of the effort or labor of man, and that labor of the lowest grade. If we place an obstacle in the way of the importation of the free gifts of Nature, we place ourselves at a disadvantage as compared with all other nations who accept them thankfully.

We would select rather, as the sources from which we can derive the remainder of our revenue with the least disadvantage, such commodities as are mainly the result of human labor or skill, and these we find in what are called manufactures; in these we find but a small portion of the gratuity of nature, and a large portion of the skill or invention and of the labor of man. And as other countries have, in the production of certain manufactures (using the word manufactures in its ordinary sense), greater skill, and more abundant and cheaper labor than we have, we can impose a tariff for revenue upon such manufactures, from which shall arise a certain amount of stimulus to home production; but which, being imposed at a rate representing a sum less than the difference in the measure of the labor required to produce it at home, will yield the revenue at a cost to the community of the revenue itself and no more.

I cannot close this treatise in a better manner than by submitting the following propositions:

Perfect protection is impracticable; but, if practicable, would cause all revenue from imports to cease, and render direct taxation imperative.

If perfect and equal protection were practicable, it would simply result in a general rise in prices and wages, and since it would prevent exports and consequently imports, it would decrease the aggregate of commodities, or in other words, the aggregate result of labor; and since capital is the surplus result of labor, a decrease in the aggregate would be a decrease in the surplus. The amount of capital would therefore be less in proportion to the number of laborers, and this condition of things would be to the disadvantage of the laborer, since, as we have before quoted from

Bastiat, "In proportion to the increase of capital, the absolute share of the total product falling to the capitalist is augmented, and his relative share is diminished; while on the contrary the laborer's share is increased both absolutely and relatively."

Imperfect, or partial protection adds to the tax which accrues to the Government a bounty to individuals or classes, in many cases more than equal to the amount of revenue secured by the Government.

A duty or tax upon articles which are mainly the result of a small amount of unskilled labor, by which the gratiitudes of nature are put into form for use, and which are known as raw materials, is an impediment to the use of the free gifts of God, which should be common to all. The nation imposing such a duty places itself at a disadvantage as compared with all other nations.

A duty or tax upon articles which are mainly the result of human labor, aided by the largest amount of skill or invention, commonly known as manufacturers, will yield a revenue at the cost to the community only of the revenue thus raised.

Protection decreases the abundance of commodities, and increases the absolute share of a small number of the people at the cost of a portion of the relative share of each.

Free Trade increases the abundance of commodities, gives to each the relative share which his education, skill or capital entitle him to, and leads to the harmonious development of the powers of all.

We shall reach specie payment, not by the prohibition of imports but by the increase of the products of labor, other than gold or silver, to such a point that other nations will buy them on account of their cheapness, rather than our specie, and thus enable us to retain specie and export cotton, oil, wheat, etc., in full for our imports.

The larger portion of the revenue now required by the United States can be obtained from commodities which are not absolutely necessary to the productive power of the people, and the remainder from a moderate revenue tariff which shall cost the people only the amount of revenue thus obtained.

A reduction of the aggregate of taxation from \$16.04 currency or \$11.46 gold per head to \$8.60 per head will yield a revenue sufficient to meet the probable expenses of the Government, and pay the debt in less than twenty years. (See appendix B).

The amount of \$8.60 per head can now be obtained from very moderate rates of taxes and duties, as compared with what we have been paying; and, as wealth, production and consumption, increase faster than population, a less and less rate of tax or duty upon commodities or interests will yield the requisite amount per head.

To secure these benefits, stability is absolutely essential; and no stability is possible until we mature and persistently follow a system in regard to the currency which shall, as soon as possible, lead us to specie payment. An inconvertible paper currency enables the few to tax the many in the most onerous and unjust manner, and judicious but uniform and persistent contraction of the currency is the first and most imperative duty of the Government.

As some surprise has been expressed, that these views should emanate from a manufacturer of cotton goods, I will add that I believe a gradual

and judicious reduction in the duties upon foreign commodities, in the manner proposed—of course preceded by an entire abolition of the internal taxes upon manufactures—will result in a more permanent and uniform condition of prosperity in the manufacture of textile fabrics, as well as of all other commodities, than we have ever yet enjoyed. If we can come slowly but surely to what is called British Free Trade, we shall share in the increase of wealth which that system has brought to Great Britain—only the benefit to us would be greater, as our natural advantages and variety of resources are greater. British Free Trade is the result of the longest experience and the greatest amount of intelligence applied to the collection of revenue; I trust it may not be many years before the people of England will learn from us the true principles upon which the laws relating to the tenure of land, the Church establishment and popular education should be based. Upon these points they are yet under the control of protective or bounty laws of the most vicious character, and which render the increase of wealth which they have derived from the modifications of their revenue system less beneficial because of the partial and inequitable division of such increase of wealth which they cause or permit.

The world demands to be supplied with the various commodities called manufactures, such as textile fabrics, iron ware, agricultural implements, etc., etc. The question is, who shall supply such commodities? Thus far, the practical answer has been, England; and we may well ask ourselves why this has been. Labor is not as cheap in England as in Germany, neither is labor as cheap in England or Germany as in India or China; yet the dear laborer of England rather than the cheap laborer of Germany supplies the inhabitants of China and of India with textile fabrics. Why is this? A complete answer could only be given by a Buckle or a Lecky; but we may glance at some of the causes.

1. The possession of large deposits of coal and iron first enabled England to supplement manual labor by cheap machinery.
2. The intelligence of England soonest relieved commerce from the trammels and fallacies of the "mercantile system."
3. The possession of coal and iron in abundance having enabled England to thrive in spite of the Protective System to which she long adhered, she has led all other nations in the adoption of what is called British Free Trade, and by that has been enabled to accumulate wealth faster than other nations which have a better although not the best system of land tenure, like France, or a far better system of education, like Germany.
4. Under the system of British Free Trade she receives from all parts of the world such commodities as their conditions of soil, climate and population, enable them to produce cheaper, paying therefor in the commodities which she can produce better or cheaper than they. She places no artificial obstacle in the way of any import because it is cheap, but simply imposes duties, *for revenue*, on a few articles of universal consumption and difficult to smuggle.

How shall we compete with England in supplying the demand of the world, for commodities, and thus secure to ourselves a greater abundance of the necessities, comforts or luxuries of life, for such is the only incentive to commerce or exchange? Neither nations nor individuals will ever es-

tablish trade of exchange with each other unless each shall in the long run get more than he gives. No permanent trade is possible where the satisfaction or gain is all on one side. The mutuality of services rendered, is essential to the continuance of mutual exchange or trade.

We want more foreign luxuries and comforts than England, because the great mass of our people can afford them better, and we have more natural resources than England, in the shape of easily worked mines, a better climate for the breeding of sheep and the product of wool, almost a monopoly in ordinary times in the production of cotton, and in all farming operations a superiority in natural advantages hardly to be measured, and therefore we have far greater power to create wealth, and in the production of wealth to combine the larger amount of the gratuity of nature with the smaller amount of labor.

I can only see one answer to the question, how we shall compete with England in supplying the world with manufactured articles, and that is by adopting the same system of British free trade as soon as our need of revenue, and a cautious, slow and judicious method in making the change, will allow us to do it.

Freedom of trade, leads to the free movement of the laborer, and he will surely seek that country where he can secure the most comfort and the best conditions of life in return for his wages and it matters not whether his wages be measured at a high or low rate. Our natural advantages would have induced a larger immigration, and would, I believe, have been more firmly established to-day and upon a larger scale than we have ever dreamed of, had we not impeded the importation of foreign commodities by protective duties, and thus confined ourselves mainly to the home market for our manufactures. We shall again share with England in the commerce of the world, and in the profit of that commerce, when we cease to deprive ourselves of the benefit of our natural advantages over England, by adherence to the principle, or rather the want of principle, involved in laws imposed for the purpose of protection.

### DEBT AND FINANCES OF CHICAGO.

The tenth annual statement of the Comptroller of Chicago, covering the fiscal year ending April 1, 1867, supplies full information relating to the financial affairs of the city and the transactions of the year then closed. The following is a statement of the public debt outstanding at the end of the fiscal year :

<i>Muni. tpal. Debt</i> (old issues), viz :		<i>Municipal Debt</i> (schools), viz :	
7 p. c. bonds, due July, 1866.....	\$1,000	7 p. c. bonds, due July, 1885.....	\$25,000
6 " " due Jan., 1867.....	1,000	7 " " due Jan., 1886.....	25,000
7 " " due Jan., 1874.....	60,000	7 " " due Jan., 1887 .....	20,000
20 " " due Jan., 1868.....	1,000		
6 " " due July, 1873.....	50,000	<i>Seiterage Debt</i> , viz :	
6 " " due July, 1874.....	40,000	7 p. c. bonds (1st loan).....	\$413,000
6 " " due July, 1875.....	100,000	6 " (1st loan).....	87,000
6 " " due July, 1876.....	100,000	7 " (2d & 3d loans, including	
		40 bonds charged S. Lind, Treasurer	839,000
		<i>River Improvement Debt</i> , viz :	
7 p. c. bonds, due Dec., 1872.....	\$89,000	7 p. c. bonds, due July, 1890.....	\$163,000
7 " " due Apr., 1881.....	904,500	<i>Water Debt</i> , viz :	
7 " " due Apr., 1885.....	24,000	6 p. c. bonds.....	1,020,000
7 " " due July, 1896.....	25,000	7 " .....	730,000

## RECAPITULATION.

	1866.	1867.		
Funded debt (old issues).....	\$353,000	\$353,000	Decrease..	\$2,000
" (new issues).....	960,500	992,500	Increase..	32,000
School construction debt.....	50,000	70,000	Increase..	20,000
Sewerage debt.....	1,236,000	1,359,000	Increase..	123,000
River Improvement debt.....	93,000	163,000	Increase..	70,000
Water debt.....	1,659,000	1,820,000	Increase..	161,000
Total funded debt .....	\$4,853,500	\$4,737,500	Increase..	\$404,000

The floating debt of the city, consisting chiefly of certificates given for temporary loans, payments for schools and sanitary purposes, judgments, water fund, etc.—

Amounted to.....	\$398,926 12
Bills payable (\$4,350), warrants on Treas. (236,114 04), and city orders (\$174 34)	240,638 38
Making a total floating of.....	\$639,564 50

The amount in the treasury at the close of the fiscal year to the credit of the several funds was \$778,990 66. The amount of warrants and city orders outstanding drawn upon the treasury was (as above) \$236,288 38. Net balance to credit, \$542,702 28. It will be seen from the above exhibit that the bonded debt is gradually increasing; and, the Comptroller continues, "if we keep pace with our rapid increase of population, it must continue to increase upon us for many years to come. The water-works will require during the present year (1867-68) not less than \$500,000 to complete the buildings, engines, and improvements that are imperatively demanded. The erection of school buildings, sewerage, river improvements (deepening of the Illinois and Michigan canal), and tunnels, will add, perhaps, \$500,000 to \$800,000, so that at the end of the present fiscal year the bonded debt of the city will not fall much short of \$6,000,000; and when all these improvements shall have been completed, for which bonds are authorized to be issued, the bonded debt cannot vary much from \$10,000,000, of which about \$5,000,000 have been provided for, to be paid by receipts from water, sewerage, sinking fund, and probable State assumption of river improvement bonds. The total city debt at the present time is \$5,397,064 50. Of this sum \$398,926 12 is for temporary loans, viz.: \$222,159 81 for the water works (to be paid from the proceeds of bonds to be issued) and the balance for school purposes (purchase of lots and erecting school buildings) sanitary expenses, judgments, &c." The rate and amount of tax levied, and the purposes for which levied for the service of the year ending April 1, 1867, were as follows:

Purpose.	Rate.	Amount.	Purpose.	Rate.	Amount.
General fund.....	4½ p. 1,000	\$386,789 63	Sewerage fund.....	2 p. 1,000	\$171,906 50
Gen'ral sinking fund. 1 "	"	85,953 25	Street & alley fund ... 2 "	"	171,906 50
Interest fund .. 1 "	"	85,953 25	Street lamp fund..... 1½ "	"	125,929 88
Improvement fund .. 1 "	"	85,953 25	Temp'y loan fund .... ½ "	"	42,976 62
Police fund .. 3 "	"	257,597 73	Total.....	20 p. 1,000	\$1,719,065 00
Reform school fund .. ½ "	"	42,976 62			
School tax fund. .... 3 "	"	257,559 75			

The receipts from general taxes for the year, including \$44,735 64 collected on the tax warrants of 1863 and 1865, amounted to the sum of \$1,559,502 84; the receipts from special assessment warrants, including miscellaneous receipts from the Board of Public Works and other sources, to \$478,540 43; from licenses \$153,858 84; from fines in the police

courts \$81,038 45; from Recorder's court, rents, &c., \$15,580 68, and from a judgment \$25,492 20. Including \$901,863 17 balance from previous year, bills payable \$159,226 11, and bonds \$6,400, the total means of the city treasury amounted to \$4,864,933 44.

The principal disbursements were on account of: Public works \$385,871 17, certificates \$120,575 00; Bridewells and cemetery \$55,227 07; evening schools \$6,957 08; Fire Department \$254,409 41; fuel \$31,217 23; health department \$61,387 86; interest \$100,612 79; judgments \$22,151 11; lamp districts \$120,922 21; permanent improvements \$15,391 13; printing and stationery \$17,585 66; police \$307,811 44; Receiver's court \$28,591 92, redemption \$13,861 18; Reform school \$73,299 99; river improvements \$129,162 37; salaries \$47,247 50; schools \$412,367 55; sewerage \$416,546 48; sewerage, sinking fund, \$20,842 50; special assessments \$685,903 76; tunnel \$19,265 85; water \$666,791 89, &c., &c.—total \$4,085,942 78, leaving in Treasury \$778,990 66.

The following statement gives a summary view of the population, valuation and taxation at the stated periods for the past 30 years:

Year.	Total pop.		Assessed Valuation		Valua.	Taxation.		
	ulation.	R'l Est'te.	Personalty.	Total.		Am't.	p. cap.	p. \$100.
1837.....	4,170	\$236,842	\$.....	\$236,842	\$36 80	\$5,905 15	\$1 41 82 49	
1840.....	4,479	94,437		94,437	21 15	4,721 85	1 11 05 5 00	
1843.....	7,580	962,221	479,093	1,441,314	190 14	8,647 89	1 11 0 60	
1845.....	12,088	2,273,171	791,851	3,065,022	253 56	11,771 58	0 91 0 36	
1846.....	14,169	3,664,426	857,231	4,521,656	319 12	15,825 80	1 11 0 32	
1847.....	16,859	4,995,446	853,704	5,849,170	346 96	18,159 01	1 08 0 31	
1848.....	20,026	4,993,266	1,302,174	6,300,440	314 66	22,051 54	1 10 0 35	
1849.....	23,047	5,151,635	1,495,047	6,676,684	246 31	30,045 09	1 30 0 45	
1850.....	29,963	5,685,965	1,554,284	7,220,249	240 97	25,270 87	0 84 0 35	
1853.....	59,130	13,120,677	3,711,154	16,841,833	284 82	135,662 48	2 30 0 80	
1855.....	80,000	21,637,500	5,355,593	26,992,593	337 41	206,209 03	2 58 0 77	
1856.....	84,113	25,892,308	5,843,776	31,736,064	377 30	396,652 33	4 72 1 25	
1860.....	109,260	31,198,155	5,855,377	37,053,512	349 13	373,815 29	3 42 1 01	
1862.....	138,186	31,580,545	5,552,300	37,129,845	268 79	564,038 06	4 08 1 50	
1864.....	169,353	37,148,023	11,584,759	48,732,782	287 75	974,653 64	5 75 2 00	
1865.....	178,492	44,064,499	20,644,678	64,709,177	362 55	1,294,183 54	7 25 2 00	
1866.....	200,418	66,495,116	19,458,134	85,953,250	428 57	1,719,064 00	8 57 2 07	

That Chicago has been gradually growing wealthier, and year by year more able to bear taxation, the above table fully illustrates. In 1850 the valuation was \$240 97, and the taxes 84 cents per capita, or 35 cents on each \$100. By 1860 the valuation had increased to \$349 13, and the taxes 84 cents per capita, or \$1 01 on each \$100. The first years of the late war materially affected the value of property, but in 1864 a reaction was evidenced which continued upward through the next two years, bringing the per capita valuation from \$268 79, as it was in 1862 to \$287 75 in 1864, \$362 55 in 1865, and \$428,87 in 1866. The rate of taxation in 1864, '65 and '66 was \$2 on the \$100, but owing to the movement in population and property, the tax averaged in 1864 \$5 75; in 1865, \$7 25; and in 1866, \$8 57 per capita. The taxes here spoken of are municipal or city taxes purely. The State taxes for 1866 amounted to \$1 28 per capita, and the county taxes (though we have no means at hand to certify our estimate) may be stated at a like rate. These added to the city taxes, will make a total of taxation levied for domestic purposes on the people of Chicago of \$11.13 per capita. And as a matter of course the people bear their share of Federal taxation and customs. In the 1st district of Illinois, which covers Cook County, in which Chicago is loca

ted, there was collected on account of internal revenue for the year 1865-66, the sum of \$6,672,286, from the following sources :

Manufac'tes and productions.....	\$3,302,168	Licenses .....	\$615,103
Slaughtered animals.....	69,243	Income.....	1,730,760
Gross receipts.....	847,523	Legacies and successions.....	7,180
Sales.....	11,301	Passports, &c .....	295
Articles in schedule A.....	16,563	Penalties, &c .....	71,849

The population of the county in that year may be estimated at 220,000 persons, and hence the federal taxes averaged about \$33 to each inhabitant.

The customs collected in the United States in the same year amounted to \$179,000,000 in gold. The population of the United States in that year was not far from 35,000,000. This gives about \$5 per capita. All these taxes added, viz.: domestic \$11 13, United States internal \$33, and United States customs \$5—make a total of \$49 13 per capita paid by the people of Chicago. Omitting customs, the internal taxes paid are about \$44 per capita.

## COMMERCIAL LAW.—No. 34.

### FIRE INSURANCE (CONTINUED).

(Continued from page 472, vol. 56.)

#### OF THE RISK INCURRED BY THE INSURERS.

At the time of the insurance, the property must be in existence, and not on fire, and not at that moment exposed to a dangerous fire in the immediate neighborhood; because the insurance assumes that no unusual risk exists at that time.

The risk taken is that of fire. And therefore the insurers are not chargeable if the property be destroyed or injured by the indirect effect of excessive heat; or by any effect which stops short of ignition or combustion. But if there be actual ignition, the insurers are liable for the immediate consequences; as the injury from water used to extinguish the fire. Or injury to or loss of goods caused by their removal from immediate danger of fire, even if it be reasonable, and not if the loss or injury might have been avoided by even so much care as is usually given in times of so much excitement and confusion.

In some instances the policies require that the insured should use all possible diligence to preserve their goods; and such a clause would strengthen the claim for injury caused by an endeavor to save them by removal. So the insurers are liable for injury or loss sustained by the blowing up of buildings to arrest the progress of a fire. But we should say, that if goods were damaged by water thrown on to extinguish a supposed fire when there was none in fact, or by the wholly unnecessary and useless destruction of a house distant from the fire, the insurers should not be held.

It must now be conceded to modern science, that lightning is not fire; and if property be destroyed by lightning, the insurers are not liable, un-

less there was also ignition ; or unless the policy expressly insures against lightning.

An explosion caused by gunpowder is a loss by fire ; not so, it is said, is an explosion caused by steam. Scientifically, it might be difficult to draw a wide distinction between these cases ; but the difference seems to be sufficient for the law.

Whether when the negligence of the insured or his servants is to be considered as the sole or direct cause of the fire or loss, the insurers can be held, has been somewhat considered. And as this is the most common and universal danger, and the very one which induces most persons to insure, there has been some disposition to say that no measure or kind of mere negligence can operate as a defence. And in effect this is almost the law. But if the loss be caused by negligence of the insured himself, of so extreme and gross a character that it is hardly possible to avoid the conclusion of fraud, the defence might be a good one, although there were no direct proof of fraud. That the fire was caused by the insanity of the insured should be no defence.

In Beaumont's work on Fire and Life Insurance in England, he gives some instances drawn from the practice of English insurance companies, a part of which, at least, rest upon sound principles, and illustrate what is probably the law, although not yet determined by adjudication. Thus, if implements or apparatus used for fire, as ranges, grates, or the like, are destroyed by fire, this loss gives no claim on the insurers. But if the chimney or other parts of the house in which the apparatus is set are injured by the same fire, for this the insurers are liable. He says, also, that where the loss is caused only by an excess of the heat or fire which was designedly used, they are not liable. But we should have some doubt as to this rule ; especially as applied to clothes hung up to dry, and catching fire from the flame, and the like. Nor are we satisfied that, if a haymow takes fire by its own fermentation, it is not a loss within the policy. If quicklime be so heated by water as to set on fire the barrels or other wood near it, it may be said that the lime itself is not burnt, and might not be hurt by being burnt, and, if destroyed by water, is not a loss within the policy ; but we do not think this would be reasonable. And if lime be put in a building, and, by being partially wet and heated, set fire to it, and for the purpose of extinguishing this fire, water is so used as to slack the lime and render it valueless, it would be a loss within the policy, unless we say that no loss gives a claim if the thing destroyed contribute to the loss, proximately or remotely. We are aware of no such rule. Thus, if cotton, by fermentation, ignited and set fire to a mill, undoubtedly the loss of the mill would be within the policy, and so would be the loss of other and disconnected cotton. And perhaps we might say that the loss of the very cotton of which the spontaneous combustion caused the fire should be within the policy.

There are various exceptions in the policies used in this country ; but they have not given rise to much adjudication, and do not generally need explanation. It may be remarked, that the exception of "military or usurped power," or any similar phrase, would not be extended so as to cover a common mob. But if the word "riot" be used, insurers are not liable for a fire caused by a tumultuous assemblage, whatever may have been the original purpose of the meeting.

If the insured be charged with burning the property insured himself, it has been held in England, that this defence could be supported only by evidence which would suffice to convict the plaintiff, if tried upon an indictment. But in this country it has been ruled otherwise.

#### OF VALUATION.

Valuation, precisely as it is understood in a marine policy, seldom enters into a fire policy—never, perhaps, in a policy made by any of those mutual companies, who now do a very large part of the insurance of this country. And quite seldom is a building valued when insured by a stock company. If a loss happens, whether it be total or partial, the insurers are bound to pay only so much of the sum insured as will indemnify the assured. But as care is always taken—and sometimes required by law—not to insure upon any house its whole value, it seldom happens, and if the proper previous precautions are taken, should never happen, that any question of value arises in a case of total destruction of a building by fire.

But mutual companies are usually forbidden by their charter to insure more than a certain proportion of the value of a building; and this requires a valuation in the policy, which is conclusive, for some purposes, against both parties. Of course the insurers can never be held to pay more than the sum insured. And if their charter or by-laws permit a company to insure only a certain proportion of the value, as three fourths—on the one hand, if the company insure more than that proportion, as \$3,500 on property valued at \$4,000, they are held to pay only \$3,000, and the assured cannot show that the building was really worth more than \$4,000; and, on the other hand, the valuation, if not fraudulent, is conclusive against the insurers if the building is destroyed, and they cannot show, in defence, that the building was worth less.

We know nothing to prevent the parties from making a valued policy, if they see fit to do so, although this has been questioned. It is not uncommon for companies who insure chattels, as plate, pictures, statuary, books, or the like, to agree on what shall be the value in case of loss.

Sometimes the policy reserves to the insurers the right to have the valuation made anew by evidence, in case of loss. Then if a jury find a less valuation, the insurers pay the same proportion of the new value which they had insured of the new valuation.

The value which the insurers on goods must pay, is their value at the time of the loss. And it has been held, that a fair sale at auction, with due precaution, will be taken to settle that value after the fire, provided the insurers have reasonable notice or knowledge that the auction is to take place.

The valuation determines the amount which the insurers must pay only in case of total destruction. If the building is only injured by fire, the insurers may either repair it, or pay the cost of repairing it.

#### OF ALIENATION.

Policies against fire are personal contracts between the insured and the insurers, and do not pass to any other party without the express consent of the insurers.

It is essential to the validity and efficacy of this contract that the insured have an interest in the property when he is insured, and also when the loss takes place; for otherwise it is not his loss, and he can have no claim for indemnity. If, therefore, he alienates the whole of his interest in the property before the loss, he has no claim; and if he alienates a part, retaining a partial interest, he has only a partial and proportionate claim.

After a loss has occurred, the right of the insured to indemnity is vested and fixed; and this right may be assigned for value, so as to give an equitable claim to the assignee, without the consent of the insurers. But we should not consider a mere assignment or conveyance of the premises as of itself an assignment of the right to recover on a policy of insurance for a previous loss, unless something in the contract, either of word or fact, showed clearly that this was intended by the parties.

Policies against fire contain a provision, that an assignment of the property, or of the policy, shall avoid the policy. So, generally, it is hardly worth while to inquire what right an assignee, without consent, would acquire at common law, or in equity, where there is no such provision. We think, however, that the weight of authority is strongly, though not conclusively, against his acquiring any claim. There seems to be some difference between fire policies and marine policies on this subject, the necessity of consent being held more strongly in the case of fire policies; but it is not easy to see a very good reason for this difference.

Nothing is properly an alienation of the property, which is less than an absolute conveyance of the title thereto. It has been held, that a sale by one joint owner of his interest in the property to the other, does not avoid the policy. But the weight of authority is, that generally such sale avoids the policy. An assignment by one partner of his interest in the partnership property to the other, is held to prevent a recovery in case of loss. But a dissolution of the partnership before loss, and a division of the goods, so that each partner owned distinct portions, was held to be in violation of a condition against "any transfer or change of title in the property insured."

Where an insured conveyed half the premises in fee, taking back a lease of the same for five years at a nominal rent, and agreeing to keep and leave the premises in repair, it was held to be an alienation, although the insured would have been bound, as lessee, to rebuild. Where the insured mortgaged the premises and assigned the policy to the mortgagee, with the consent of the insurer, and afterwards conveyed the premises away, it was held that the policy remained valid as to the mortgagee, and for the amount of the debt, on the ground that the insured could do nothing to affect the rights of the assignee without his consent. In this case it was also held, that payment of an assessment after the property is burned does not remove the effect of an alienation.

A conveyance by one insured intended to secure a debt, will be treated in a court of equity as a mortgage, and therefore it does not terminate the interest of the insured. A contract to convey is not an alienation. Nor is a conditional sale, where the condition must precede the sale, and is not yet performed. Nor is a mortgage, not even after breach, and perhaps entry for a breach, and not until foreclosure. Nor selling and immediately taking back. But bankruptcy is said to be an alienation; and if there were a voluntary assignment by one insured to his assignee in trust,

it should operate so, as much as a direct transfer to creditors. There are reasons, however, for drawing a distinction between such a case, and one where the law takes possession of property insured for creditors; at least, we should say that, in such case, the insurance might remain valid until the assignees or commissioners sold the property. If several estates are insured in one policy, and one or more are aliened (or conveyed away), the policy is void as to those only which are aliened. If many owners are insured in one policy, a transfer by one or more to strangers, without the act or concurrence of the other owners, will avoid the policy for only so much as is thus transferred.

Policies of insurance are not negotiable—that is, not assignable in such way as to give to the assignee a right of action in his own name—in most of our States. But the moral or equitable interest of the transfereree will sustain a promise by the insurers to him, and if such express promise be made, on this he may bring his action. If he brings it in the name of the assignor, it must, generally at least, be subject to all the defences which the insurers could make against the assignor. It is possible that there should be some qualification of this rule. Undoubtedly, no insured party can make a transfer which shall operate injuriously on the insurers, and yet preserve the rights so transferred. On the other hand, if he, by the terms of the policy, may transfer it with the consent of the insurers, and after such transfer and consent the originally insured fraudulently burns the building, there would be strong reasons for holding the insurance still valid, in favor of the innocent transferree. Perhaps the question would turn upon this: Did the transferree pay, or assume the obligation of paying, or guarantee the payment, of any premiums? If so, he should be held insured, although the terms of the policy and transfer might oblige him to bring his action in the name of the incendiary. Where possible, such transfer, with such consent, would undoubtedly be regarded by the courts as a new and independent contract with the transferree.

An alienation, or even actual surrender of the policy, does not avoid the premium note, or the obligation of the insured to pay his share of the previous losses. If, therefore, after an alienation, the insurers, with full knowledge of it, demand and receive from the insured payments on such account, it is no waiver of the forfeiture of the policy caused by the alienation. From some cases it would seem that, if the insurers called for and received payments accruing subsequently, it would not revive their obligation, on the ground that the policy is so completely annulled by the alienation, that it cannot be revived by any waiver. But we should have much doubt of this. If the insurers expressly waived the forfeiture, it would make them responsible to the transferree.

In practice, care should be taken to have all such transfers regularly made and notified, and the consent obtained fully authorized, and duly indorsed or certified, and all the rules or usages of the insurers in this respect complied with.

Where one insured against fire recovered of his insurers for a loss caused by a railroad company for which the railroad company was liable to the insured, it was held that this operated as an equitable assignment to the insurers of the claims of the insured against the railroad company; and the insurers might enforce this by a suit in the name of the insured.

## OF NOTICE AND PROOF.

Where the policy requires a certificate of the loss, the production of it is a condition precedent to any claim for payment. And it must be such a certificate as is required; but a substantial compliance with its requirements is sufficient. So, too, if the notice is to be given forthwith, there must be no unreasonable or unnecessary delay. And all the circumstances of the case are considered, in determining whether there was or was not due diligence. A notice of a loss, which was required by the policy to be given "forthwith," and was in fact given thirty-eight days after a loss, has been held insufficient. But circumstances may justify a longer delay. Where a certificate is required to be furnished "as soon as possible," it is still sufficient if it be furnished within a reasonable time. But where the fire took place in November, and the account of loss was not furnished till the March following, it was held not to be a compliance with the conditions. Generally, this is a question for the jury.

In fire policies, as the premises may be supposed always open to the inspection of the agents of the insurers, a general notice of the fire will probably be enough.

If the assured has assigned the policy with consent, the assignee may give the notice; and if he does, the neglect of the original insured to give notice does not prejudice the assignee.

The insurers may waive their right of notice wholly or partially. And they may do this expressly, or by any acts which fairly indicate to the insured that they accept an imperfect notice given to them, or that they do not need and do not require that any notice should be given, or that they have taken the matter into their own hands, and have made inquiries, and obtained all the information possible. And a refusal "to settle the claim in any way," has been held to supply a good excuse for not offering notice.

The preliminary proofs, by which is meant affidavits, certificates, statements, etc., setting forth the loss and its circumstances, though required by the policy, are not admissible as evidence as to the damages or amount of claim. If it were provided in the policy that they might be so used, this would make them evidence, but we are not aware that this is ever said expressly, and it cannot be inferred from the mere requirement of them.

If the policy provide that the assured shall, if required, submit to an examination under oath, the insurers are not bound by his statement under oath; but if he be duly required, and therefore submit himself to an examination under oath, he cannot afterwards be required to submit to further examination under oath.

## OF ADJUSTMENT AND LOSS.

Insurers against fire are not held to pay for loss of profits, gains of business, or other indirect and remote consequences of a loss by fire. We do not know, however, why profits may not be specifically insured against fire, where it is not forbidden by, or inconsistent with, the charter of the insurers.

There is one wide difference between the principle of adjustment of a marine policy and of a fire policy. In the former, if a proportion only of the value is insured, the insured is considered as his own insurer for the residue, and only an equal proportion of the loss is paid. Thus if, on a ship valued at \$10,000, \$5,000 be insured, and there is a loss of one-half, the insurers pay only one-half of the sum they insure, just as if some other insurer had insured the other \$5,000. But in a fire policy, the insurers pay in all cases the whole amount which is lost by fire, provided only that it does not exceed the amount which they insure.

It is said that general average clauses or provisions are inserted in fire policies in England; but they are not known here. Still, in one case, the principle of general average was partially applied. Blankets were used by the insured, with the consent of the insurers, to protect a building from a near fire; they did this effectually, but were themselves made worthless, and an action of the insured against the insurers for this loss was sustained by the court. But the owners of other buildings in the neighborhood, who might have been protected by the use of the blankets, were thought to be too remotely interested to be liable to contribution.

As a contract of fire insurance is an entire one, if the policy ever attaches, there should be no return of premium, although the property be destroyed the day after, and not by fire; as by demolition by whirlwind, or other similar accident. If, however, there were an insurance on goods believed to be at a certain place, at a certain time, and none of them were there, there might be an entire return of premium, because there was never any insurance. But if a part were there, there should be no partial return; because the rule that, where a part only is insured, only a proportionate part is paid by the insurers in case of loss, applies only to marine policies, as stated above.

Most of the fire policies used in this country give the insurers the right of rebuilding or repairing premises destroyed or injured by fire, instead of paying the amount of the loss. If, under this power, the insurers rebuild the house insured, at a less cost than the amount they insure, this does not exhaust their liability; they are now insurers of the new building for the difference between its cost and the amount they have insured. And if the new building burns down, or is injured while the policy continues, the insurer may claim so much as, added to the cost already incurred, shall equal the sum for which he was insured.

It may be important to add that, under our common mutual policies, the insured will also be liable for assessments for losses after the destruction of the building by fire, during the whole term of the policy.

There is no rule in fire insurance similar to that which makes a deduction, in marine insurance, of one-third, new for old. Still the jury, to whom the whole question of damages is given, are to inquire into the greater value of a proposed new building, or of a repaired building, and assess only such damages as shall give the insured complete indemnity.

Where insurers had reserved a right to replace articles destroyed, and the insured refused to permit them to examine and inventory the goods that they might judge what it was expedient for them to do, Chancellor Walworth refused to aid the insurers in a court of equity; but such con-

duct on the part of the insured would be evidence to the jury of great weight to prove an overstatement of loss.

If, after the adjustment and payment, there appears to have been fraud in the original contract, or in the adjustment, or material mistake of fact, it would seem that money paid may be recovered back; but not so if the mistake be of law.

If the policy contains a provision that any fraud in the claim, or any false swearing or affirmation in support of it, shall avoid the policy (as is frequently the case in England), it would seem that it would be left to the jury to say whether there was any material and substantial fraud connected with the matter, and if so, to find for the insurers.

From the present state of the authorities, it may be stated, as a general rule, that the law allows no claim upon the proceeds of policies of fire insurance in favor of any third parties, unless there be a bargain or contract, or a trust, to that effect. Thus, a tenant cannot compel his landlord to expend money received from an insurance office, on the demised premises being burnt down, for rebuilding them, nor prevent the landlord from suing for the rent until the premises are rebuilt, if, by the terms of the lease rent is due although the building is burned.

(To be Continued.)

### TOLEDO, WABASH AND WESTERN RAILROAD.

The Toledo, Wabash and Western Railway Company is a consolidation of the Toledo and Wabash, the Great Western of 1859, the Quincy and Toledo, and the Illinois and Southern Iowa Companies—these organizations being merged into one by articles of consolidation duly ratified and confirmed July 1, 1865. In pursuance of this consolidation the present company is now operating a great, direct through line of railway, commencing at Toledo, Ohio, and terminating at Quincy, Ill., and Keokuk, Iowa, with a branch running to Naples, on the Illinois River, making the entire length of road (including 22 miles [leased] of the Chicago, Burlington and Quincy Railroad) about 520.6 miles. Of the main line 75.5 miles are in Ohio, 166.9 miles in Indiana, and 211 miles in Illinois. The Keokuk Branch has a length of 41.2 miles, and the Naples Branch a length of 4.0 miles. Total length owned by the company 498.6 miles. The share capital of the company now amounts to \$6,700,000, as follows:

General stock—57,000 shares.....	\$5,700,000
Preferred stock—10,000 shares.....	1,000,000

Total share capital ..... \$6,700,000

Below we give a statement of the funded debt of the consolidated company, showing a total of \$13,300,000:

Bonds.		Interest.	Due.	
7 p. c. 1st mort., (Tol. & Ill. RR., 75.5 m.)....	Feb. & Aug. 1894.....		\$900,000	
7 do (L.E.W. & St. L. RR., 166.9 m.).....	do 1890.....		2,500,000	
7 do (Gt. W. RR., E. Div., \$1.0 m.).....	do 1865.....		45,000	
10 do ( do W. Div, 100.0 m.) Apr. & Oct. 1868.....			1,000,000	
7 do (Gt. W. RR. of '59, 181.0 m.) Feb. & Aug. 1888.....			1,455,000	
7 do (Q. & Tol. RR., 34.0 m.).....	do 1890.....		500,000	
7 do (Ili. & So. Iowa RR., 41.2 m.).....	do 1882.....		300,000	
7 p. c. 2d mort., (Tol. & W. RR., 75.5 m.)....	May & Nov. 1878.....		1,000,000	
7 do (Wab. & W. RR., 166.9 m.)...	do 1878.....		1,500,000	
7 do (Gt. W. RR. of '59, 181.0 m.)...	do 1893.....		2,500,000	
7 p. c. Equipm't, (Tol. & W. Rwy, 242.4 m.)....	Apr. & Oct. 1883.....		600,000	
7 p. c. Sk'g fund, (T. Wa. & W. Rwy, 498.6 m.)	do 1871.....		1,000,000	

Total funded debt on 498.6 miles of road..... \$13,300,000

With the exception of \$1,000,000, the bonds named in the above list cover only sections of the present road; and it being deemed for the interest of all parties that these various classes issued by and bearing the titles of the several corporations now represented by this company, shall be consolidated into one and the same mortgage debt, the Board of Directors have decided to create and issue its coupon bonds, entitled "Consolidated Mortgage Sinking Fund Convertible Bonds," of sufficient amount and for the purpose of retiring all of these outstanding securities. To secure the payment of the principal and interest it is proposed that a mortgage shall be executed, covering the entire real and personal property of the company from Toledo to the Mississippi, to constitute the first mortgage lien upon the consolidated property of the Company. For the purpose of giving these consolidated bonds a special advantage and value, the mortgage securing them will not only embrace the entire amount of property pledged for the old bonds, but a large and valuable amount heretofore entirely free and unencumbered, besides original liens upon important contracts, accessions and franchises more recently acquired. The time and conditions for the exchange of these bonds will soon be made known.

The gross earnings of the road for the half fiscal year ending December 31, 1865, and for the full year 1866, together with the operating expenses during the two periods, are presented in the annexed statement, viz.:

	July to Dec. 1865	Jan. to Dec. 1866
Passenger transportation.....	\$ 896,963 08	\$ 1,322,846 73
Freight " .....	1,020,258 38	2,209,427 35
Mail " .....	26,000 00	52,000 00
Express " .....	49,042 10	98,345 17
Miscellaneous .....	40,846 59	34,766 92
 Gross earnings.....	\$2,033,109 15	\$3,717,886 22
Roadway—renewals .....	\$109,017 30	\$241,051 79
" —maintenance .....	338,024 86	624,066 25
Cars, engines, &c.—maint'co .....	276,587 12	556,605 73
General exp'n's transp't'n &c. ....	763,558 98—1,487,438	261,389,462 68—2,811,186 50
 Residuary income .....	\$545,670 86	\$906,199 72

The revenues of the company have been very seriously impaired in consequence of the disasters to the wheat crop during the past two years throughout the entire extent of country traversed by the road. In evidence of the nature and extent of this loss, it may be stated that the falling off in the tonnage of wheat and flour during the 18 months covering the company's report, as compared with the same period of previous years, is equal to 1,500,000 bushels, the earnings upon which would have been \$660,000. It is to this unlooked for misfortune the directors attribute their inability to declare satisfactory dividends on capital. The increase in each and all other branches of traffic upon the road as compared with previous years has been marked and encouraging. The coal and lumber business especially indicate a remarkable growth and promise to become the most permanent and productive sources of revenue.

The company have eleven engines houses and 102 stations on the line of their road. The equipment now consists of 102 locomotives, 47 passenger cars, 1,040 box freight cars, 27 mail and baggage cars, 275 stock cars, 200 platform cars, and 150 coal cars. The whole number of passengers carried in the six months of 1865 was 366,525, and in the year 1866,

624,378. The amount of freight carried in the two periods was as follows:

	July-December, 1865.			Jan.-December, 1866.		
	Eastw'd.	Westw'd.	Total.	Eastw'd.	Westw'd.	Total.
Grain.....	bushels 1,070,193	156,693	1,226,886	3,910,711	394,713	4,304,984
Cattle.....	cars 3,000	75	3,075	7,245	139	7,384
Hogs.....	cars 939	143	1,112	2,972	398	3,370
Lumber.....	1,000 feet 3,664	16,535	2,505	4,615	23,591	28,206
Sundries.....	tons 47,657	79,214	117,871	120,284	141,075	261,359
Freight earnings.....	.....	.....	.....	\$529,075	\$491,121	\$1,020,196
				\$1,299,124	\$910,303	\$2,209,427

The Income account, showing the residuary balances for the eighteen months since consolidation and other receipts as per Treasurer's books, and the disbursements on account of renewals, construction, equipment &c., charged thereon, supplies the following summary:

DEBTOR.	CREDITOR.
Locomotives, cars, tools, &c. ....	\$297,541 10
Construction .....	316,432 90
Interest account.....	1,328,180 37
Profit & Loss—Discount, &c. ....	201,841 93
Tol. Wab. & Western R. Co.....	17,016 63
Ill. & So. Iowa, R.R. Co.....	129,807 07
Total.....	\$2,280,820 25
	Balance Dec. 31, 1865.....
	1866.....
	Supplies from old comp'ies.....
	Sinking Fund Bonds.....
	1,000,000 00
	Surplus income .....
	\$2,554,419 5
	Total.....
	\$2,554,419 5
	273,599 00
	Total.....
	\$2,280,820 25

The Treasurer's General Balance Sheet of December 31, 1866, reads as follows:

DEBTOR.	CREDITOR.
Railway & equipment.....	\$19,850,000 00
Trustees.....	1,195,000 00
Materials & fuel on hand.....	303,014 07
U. S. Post office, &c.....	30,809 31
Wabash Elevator Stock.....	10,000 00
Sundries.....	24,776 32
Equalization account.....	700,300 27
Total.....	\$22,113,900 47
	Capital Stock.....
	Funded Debt.....
	Coupons of 1865 & 1866.....
	Balance of Income ac't.....
	Cash and Bank account.....
	Treasurer's Equalization account.....
	Bills payable.....
	Total.....
	\$22,113,900 47

The general account current (covering the whole period since the consolidation) shows the amount of money received from all sources, and what disposition was made of the same, as follows:

RECEIPTS.	DISBURSEMENTS.
Net earnings (6 mos.) 1865.....	\$545,670 89
do (12 mos.) 1866.....	906,199 72
Sinking fund, bonds issued.....	1,000,000 00
'reas. on equalizat'n ac't.....	665,726 19
Bills payable.....	15,500 00
Bank ac't (overdrafts).....	\$71,799 53
Less due from U. S., &c.....	55,586 13—16,204 40
Total.....	\$3,149,301 20
	Equipment.....
	Construction.....
	Interest on bonds, &c.....
	Ill. & Southern Iowa R.R. ....
	Discount on bonds, &c .....
	Equalization account.....
	Advanced for wood and supplies
	Toledo & Wabash R.R. Co. ....
	Wabash Elevator stock.....
	Total.....
	\$237,541 10
	316,432 90
	1,285,895 62
	129,807 27
	201,841 97
	700,300 24
	200,465 43
	17,016 63
	10,000 00
	\$3,149,301 20

It will be seen from this statement that the company, after promptly paying the interest upon each and every class of its funded obligations, including the dividends upon its preferred stock, closes with the year in a sound financial condition, and without any floating debt or outstanding liability whatever.

The monthly range of prices at which the stocks of the consolidated com-

panies sold at New York in the year 1866 are given in the following statement :

	General.	Preferred.		General.	Preferred.
January .....	42 @42	....@....	July.....	35 @40	61 @61
February .....	31 @40	....@....	August.....	39 @47½	67½@67½
March .....	31½@33	....@....	September.....	43½@46½	71 @73½
April .....	32 @39	63 @63	October.....	44 @45	73 @75
May .....	33½@37½	....@....	November.....	40 @54½	73 @75½
June.....	35 @36	....@....	December.....	40½@45½	....@....

—range during the year—general 31@55, and preferred 61@75½. On the 1st of June current the closing quotations were—general 41½, and preferred 62.

## RAILWAY EXTENSION AND ITS RESULTS.

BY R. DUDLEY BAXTER, M.A.\*

### I.—INTRODUCTION.

If a Roman emperor, in the most prosperous age of the empire, had commanded a history to be written of that wonderful system of roads which consolidated the Roman power, and carried her laws and customs to the boundaries of the accessible world, it would have afforded a just subject for national pride. The invention and perfecting of the art of road making, its sagacious adoption by the State, its engineering triumphs, its splendid roads through Italy, through Gaul, through Spain, through Britain, through Germany, through Macedonia, through Asia Minor, through the chief Islands of the Mediterranean, and through Northern Africa; all these would have been recounted as proofs of Roman energy and magnificence, and as introducing a new instrument of civilization, and creating a new epoch in the history of mankind.

A similar triumph may fairly be claimed by Great Britain. The Romans were the great Road-makers of the ancient world—the English are the great Railroad-makers of the modern world. The tramway was an English invention, the locomotive was the production of English genius, and the first railways were constructed and carried to success in England. We have covered with railroads the fairest districts of the United Kingdom, and developed railways in our colonies of Canada and India. But we have done much more than this, we have introduced them into almost every civilized country. Belgian railways were planned by George Stephenson. The great French system received an important impulse from Locke. In Holland, in Italy, in Spain, in Portugal, in Norway, in Denmark, in Russia, in Egypt, in Turkey, in Asia Minor, in Algeria, in the West Indies, and in South America Englishmen have led the way in railway enterprise and construction. To this day, wherever an undertaking of more than ordinary difficulty presents itself, the aid is invoked of English engineers, English contractors, English navvies, and English shareholders; and a large portion of the rails with which the line is laid, and the engines and rolling stock with which it is worked are brought from England.

\* Read before the Statistical Society of London November, 1866

To Englishmen the annals of railways must always be of the highest interest, and I trust that the brief inquiry upon which I am about to enter will not be deemed a waste of labor. I propose to examine into the extension of railways at home and abroad; to show the rate at which it is proceeding; the expenditure which it has cost; and its vast commercial results. The practical questions will follow whether the construction of Railways in the United Kingdom has reached its proper limit? Are we over-railroaded, as some assert, so that railways ought to be discouraged? Or are we under-railroaded, so that fresh railways ought to be invited? Are other nations passing us in the race of railway development? And, lastly, can any improvement be introduced into our railway legislation?

## II.—RAILWAYS IN THE UNITED KINGDOM.

So far as roads are concerned, the dark ages may be said to have lasted from the evacuation of Britain by the Romans in 448, to the beginning of the last century. During the whole of that period nothing could be more barbarous or impassable than English highways. The Scotch rebellions first drew attention to the necessity of good roads. The first step was to establish turnpikes, with their attendant waggons and stagecoaches; superseding the long strings of packhorses which, up to that time, had been the principal means of transport. The second step was to render navigable the rivers which passed through the chief seats of industry. The third, which commenced later in the century, was to imitate the rivers by canals, and to construct through the north and centre of England a network of 2,600 miles of water communication, at an outlay of £50,000,000 sterling. But roads and canals combined were insufficient for the trade of Lancashire and Yorkshire, and bitter complaints were made of expense and delay in the transmission of their goods.

The desired improvement came from the mining districts. Since the year 1700 it had been the custom to use wooden rails for the passage of the trucks. About the year 1800 Mr. Outram, in Derbyshire, laid down iron rails upon stone sleepers, and the roads so constructed took from him the name of Outram's Ways or Tramways. About the year 1814, the ingenuity of mining engineers developed the stationary steam-engine into a rude locomotive, capable of drawing heavy loads at the rate of four or five miles an hour. It was proposed to construct a public railway on this principle between Stockton and Darlington. After much delay the line was opened by George Stephenson in 1825, and the experiment was successful as a goods line—unsuccessful, from its slowness, as a passenger line. The next experiment was the Manchester and Liverpool Railway, projected as a goods line to accommodate the increasing trade of those two places, which was crippled by the high rates of the canal and navigation. Before the railway was completed, another great improvement had taken place in the construction of locomotives by the discovery of the multitubular boiler, which immensely increased the volume of steam, and the speed attainable.

The opening of the Manchester and Liverpool Railway on 15th September, 1830, was the formal commencement of the railway era. On that day the public saw for the first time immense trains of carriages loaded,

with passengers, conveyed at a rate of more than fifteen miles an hour, a speed which was largely exceeded in subsequent trials. The desideratum was at length obtained, viz., the conveyance of large masses of passengers and goods with ease and rapidity; and it was seen that the discovery must revolutionize the whole system of inland communication.

The public feeling was strangely excited. Commercial men and men of enterprise were enthusiastic in favor of the new railways and eager for their introduction all over the country. But the vested interests of roads and canals, and landed proprietors who feared that their estates would be injured, together with the great body of the public, were violently prejudiced against them. Railways had to fight their way against the most strenuous opposition. I quote from the "Life of Robert Stephenson," the engineer of the London and Birmingham line:

"In every parish through which Robert Stephenson passed, he was eyed with suspicion by the inhabitants, and not seldom menaced by violence. The aristocracy regarded the irruption as an interference with territorial rights. The humbler classes were not less exasperated, as they feared the railway movement would injure those industrial interests by which they lived. In London, journalists and pamphleteers distributed criticisms which were manifestly absurd, and prophecies which time has signally falsified."—Vol. i, p. 169.

The city of Northampton was so vehement in its opposition, that the line was diverted to a distance of five miles, through the Kilsby Tunnel, to the permanent injury both of the city and railway. The bill was thrown out in Parliament, and only passed in the following session by the most lavish expenditure in buying off opposition.

Other lines were soon obtained in spite of the same vehement hostility. The Grand Junction Railway from Liverpool to Birmingham, was passed in 1833. The Eastern Counties Railway was sanctioned in 1834. It was launched as a 15 per cent. line. It is said that a wealthy banker in the eastern counties made a will, leaving considerable property to trustees to be expended in parliamentary opposition to railways. The Great Western was thrown out in 1834, but passed in 1835. The London and Southampton, now the London and South Western, was proposed in 1832, but was not sanctioned till 1834.

In 1836 came the first railway mania. Up to this time the difficulty had been to pass any bill at all, now competing schemes began to be brought before Parliament. Brighton was fought for by no less than five companies, at the total expenditure of £200,000. The South Eastern obtained its act after a severe contest with the Mid Kent and Central Kent. Twenty-nine bills were passed by Parliament authorising the construction of 994 miles of railway. In the autumn the mania raged with the greatest violence. "There is scarcely," said the Edinburgh Review, "a practicable line between two considerable places, however remote, that has not been occupied by a company; frequently two, three or four rival lines have started simultaneously." The winter brought a crash, and the shares of the best companies became almost unsaleable.

In 1845 most of the great lines had proved a success. The London and Birmingham was paying 10 per cent., the Grand Junction 11 per cent., the Stockton and Darlington 15 per cent., and railway shares were on an average at 100 per cent. premium. The railway mania broke out

with redoubled violence; railways appeared an El Dorado. The number of miles then open was 2,148. The number of miles sanctioned by Parliament in the three following sessions was:

1845.....	2,700
1846.....	4,538
1847.....	1,354
Total .....	8,592

Had all these lines been constructed, we should have had in 1852 more than 10,700 miles of railway, a number which was not actually reached till 1861, or nine years later. But the collapse in 1846 was so severe that an act was passed for the purpose of facilitating the dissolution of companies, and a large number of lines were abandoned, amounting, it is said, to 2,800 miles.

Railway extension was now menaced with a new danger. The effect of the panic was so great, and the losses on shares so severe, that the confidence of the public was destroyed. Besides this, as the new lines were opened, the dividends gradually decreased till the percentage of profit on capital had gone down from  $5\frac{1}{2}$  per cent. in 1845 to  $3\frac{1}{2}$  in 1849 and  $3\frac{1}{3}$  in 1850, leaving scarcely anything for ordinary shareholders. As a consequence, shareholders' lines were at an end. But since 1846 a new custom had been gaining ground of the amalgamation of smaller into larger companies. I may instance the North Eastern Company, which consists of twenty-five originally independent railways. In this manner eleven powerful companies had been formed, which divided the greater part of England between them. The competition between these companies for the possession of the country was very great, and by amalgamations, leases, guarantees, and preference stocks, they financed a large number of lines which otherwise could not be made. In this manner the construction of railways between 1850 and 1858 progressed at the rate of nearly 400 miles a year.

But towards the end of 1858 the great companies had exhausted their funds and ardor, and proposed terms of peace. The technical phrase was "that the companies required rest." Again it seemed probable that railway extension would be checked. But a new state of things arose. Twenty years of railway construction had brought forward many great contractors, who made a business of financing and carrying through lines which they thought profitable. The system had grown up gradually under the wing of the companies, and it now came to the front, aided by a great improvement in the value of railway property, on which the percentage of profits to capital expended had gradually risen from  $3\frac{1}{3}$  per cent. in 1850 to  $4\frac{1}{3}$  in 1860. The companies also found it their interest to make quiet extensions when required by the traffic of the country. Thus railway construction was continued in the accelerated ratio of more than 500 miles a year. The following table gives a summary of the rate of progress from 1845 to 1865:—

## UNITED KINGDOM—MILES CONSTRUCTED.

Year.	Miles Opened.	Average Number Opened per An.
1834.....	about 200	133
1840 .....	" 1,200	240
1845.....	2,440	812
1850.....	6,500	867
1855.....	8,385	425
1860.....	10,434	
1865.....	13,289	571

During the same year the percentage of profits to capital expended were as follows:—

	Per cent.		Per cent.
1845.....	5.48	1860.....	4.39
1850 .....	3.81	1865.....	4.46
1855.....	3.90		

The latter table, which is abridged from an annual statement in *Herepath's Journal*, scarcely gives an idea of the gradual manner in which the dividends sank from their highest point in 1845 to their lowest in 1850, and of their equally gradual recovery from 1850 to 1860 and 1865. The main results of the two tables are, first, the close connection between the profit of one period and the average number of miles constructed in the next five years, and, second, the fact that the construction of railways in the United Kingdom has been steadily increasing since 1855, and is now more than 500 miles per annum.

The number of miles authorized by Parliament during the last six years is stated in the *Railway Times* to be as follows:—

Year.	Miles.	Year.	Miles.
1861.....	1,832	1864.....	1,329
1862.....	809	1865.....	1,996
1863.....	795	1866.....	1,662
Average.....			7,323
			1,220

Hence the miles authorized by Parliament for the last six years have been double the number constructed; and there must be about 3,500 miles not begun or not completed—a number sufficient to occupy us for fully seven years, at our present rate of construction.

Such is a brief summary of the history of railway extension in Great Britain and Ireland. It may be thrown into five periods:—

1. The period of experiment, from 1820 to 1830.
2. The period of infancy, from 1830 to 1845.
3. The period of mania, from 1845 to 1848.
4. The period of competition by great companies, from 1848 to 1859.
5. The period of contractor's lines and companies' extensions, from 1859 to 1865.

## III.—DISTRIBUTION OF RAILWAYS IN THE UNITED KINGDOM.

The returns of the Board of Trade to the end of 1865 give the following distribution of the 13,289 miles then open:—

	Double Lines.	Single Lines.	Total Miles Open.
England and Wales.....	6,081	3,170	9,251
Scotland.....	946	1,254	2,200
Ireland.....	476	1,362	1,838
	7,503	5,786	13,289

Hence there is a considerable preponderance of double lines over single lines in England, and of single lines over double in Scotland and Ireland.

The following table shows which country has the greatest length of railways in proportion to its area:—

	Area in Square Miles.	Railway Mileage.	Square Miles per Mile of Railway.
England and Wales.....	57,812	9,251	6.25
Scotland.....	30,715	2,200	14.
Ireland.....	32,512	1,838	17.7

So that England and Wales have a mile of railway for every six and a half square miles of country, being the highest proportion in the world, while Scotland has less than half that accommodation, and Ireland little more than one-third.

The following table shows which country has the greatest length of railway in proportion to population:—

	Population in 1860.	Railway Mileage.	Population per Mile of Railway
England and Wales.....	20,228,497	9,251	2,186
Scotland.....	3,096,308	2,200	1,409
Ireland.....	5,850,309	1,838	3,152

So that Scotland, a thinly inhabited country, has the greatest railway mileage in proportion to her population, and we shall afterwards find that she stands at the head of all European countries in this respect.

The manner in which this railway mileage is distributed through England deserves some attention. A railway map will show that the general direction of English lines is towards the metropolis. London is a centre to which nearly all the main lines converge. Every large town is, in its degree, a centre of railway convergence. For example, look at the lines radiating from Leeds, from Hull, from Birmingham, or from Bristol. But all those lesser stars revolve, so to speak, round the metropolis as a central sun.

A great deal may be learned of the character and political state of a country from the convergence of its railway lines. Centralising France concentrates them all on Paris. Spain, another nation of the Latin race, directs her railways on Madrid. Italy shows her past deficiency of unity, and want of a capital, by her straggling and centreless railroads. Belgium is evidently a collection of co-equal cities without any preponderating focus. Germany betrays her territorial divisions by the multitude of her railway centres. Austria, on the contrary, shows her unity by the

convergence of her lines on Vienna. The United States of America prove their federal independence by the number of their centres of radiation.

The national character of the English nation may be traced in the same way. Though our railways point towards London, they have also another point of convergence—towards Manchester and the great port of Liverpool. The London and North Western, the Great Northern (by the Manchester, Sheffield and Lincolnshire line), the Great Western and the Midland run to Manchester and Liverpool from the south. The Manchester, Sheffield and Lincolnshire railway, the London and North Western Yorkshire and Carlisle lines, and the network of the Lancashire and Yorkshire Company converge on them from the east and north. The London and North Western Welsh railways and the Mid Wales and South Wales lines communicate with them from the west. Thus our railway system shows that Manchester and Liverpool are the manufacturing and commercial capitals of the country, as London is its monetary and political metropolis, and that the French centralization into a single great city does not exist in England.

It remains to describe the great systems into which the English railways have been amalgamated. There are in England twelve great companies, with more than £14,000,000 each of capital, which in the aggregate comprises nearly seven-eighths of our total mileage and capital. They divide the country into twelve railway kingdoms, generally well defined, but sometimes intermingled in the most intricate manner. They may be classified into the following seven districts:—

	Miles Open.	Capital Expended.
1. <i>North Western District</i> —London and North Western Railway.....	1,806	£53,210,000
2. <i>Midland District</i> —Midland Railway.....	677	26,103,000
3. <i>North Eastern District</i> —Great Northern Railway.....	422	18,200,000
North Eastern Railway .....	1,121	41,158,000
4. <i>Mersey to Humber District</i> —Lancashire and Yorkshire Railway.....	403	21,114,000
Manchester, Sheffield and Lincolnshire Railway.....	246	14,113,000
5. <i>Eastern District</i> —Great Eastern Railway.....	709	23,574,000
6. <i>South Eastern District</i> —South Eastern Railway.....	319	18,626,000
London, Chatham and Dover Railway.....	175	14,768,000
London and Brighton Railway.....	294	14,561,000
7. <i>South Western District</i> —London and South Western Railway.....	500	16,364,000
Great Western Railway.....	1,292	47,630,000
<hr/> Total.....	7,564	£309,421,000

In Scotland there are three great companies:—

	Miles Open.	Capital Expended.
1. <i>South East Coast</i> —North British Railway.....	732	£17,802,000
2. <i>Central District</i> —Caledonian Railway.....	561	14,797,000
3. <i>South West Coast</i> —Glasgow and South Western.....	249	5,603,000
<hr/> Total.....	1,542	£38,202,000

which include three-fourths of the whole mileage and capital of Scotch railways.

In Ireland there are only two large companies :—

		Miles Open.	Capital Expended.
1. <i>South Western District</i> —Great Southern and Western	420	£5,712,000	
2. <i>Midland District</i> —Midland Great Western.....	260	3,625,000	
Total.....	680	£9,337,000	

which embrace rather more than two-fifths of the capital and mileage.

The above figures are taken from *Herepath's Railway Journal*, made up very nearly to the present time.

The following table shows the average gross receipts and net profits, for three years, for the United Kingdom, and also the dividends paid on ordinary stock in the above great companies, except the London, Chatham and Dover :—

AVERAGE RECEIPTS AND DIVIDENDS PER CENT.

	1857.	1861.	1865.
Gross receipts.....	7.87	8.27	8.57
Net profits.....	4.19	4.30	4.46
<i>Dividends of Great Companies :</i>			
12 English.....	4.00	4.45	4.65
3 Scotch.....	4.55	4.90	5.70
2 Irish.....	5.00	5.00	3.56
Average dividends.....	4.51	4.78	4.64

IV.—COST OF RAILWAYS IN THE UNITED KINGDOM.

The total capital authorized and expended, up to the end of 1865, is given in the Board of Trade Returns, as follows, including the companies estimated for who have not made a return.

CAPITAL AUTHORIZED.

Shares.....	£434,457,000
Loans.....	143,968,000
Total.....	£578,425,000

CAPITAL EXPENDED.

<i>Debenture Capital :</i>	
Stock.....	£13,312,000
Mortgages.....	98,059,000—111,871,000
Preference capital.....	124,517,000
Ordinary capital.....	220,038,000
	£456,421,000

Hence the following conclusions :—

1. The capital expended is more than half as large as the national debt.
2. The debenture and preference capital, which are practically first and second mortgages of railway property, amounted in 1865 to more than half the whole capital expended.

So that railway property is virtually mortgaged to the debenture and preference capitalist for about half its value.

The preference capital has for some years been steadily increasing, while the ordinary capital has remained almost stationary. During 1865 the preference capital increased by £19,615,000, while the ordinary capital only increased by £4,650,000. As the old companies almost always increase their capital by preference stock, I anticipate that in seven or eight years the debenture and preference capital will have risen to two-thirds of the capital expended.

3. The unissued or unpaid capital was, in 1864, £95,000,000. This increased largely in 1865, by the great number of miles authorized in that year, and in the return for that year is £122,000,000.

The expenditure was, in 1864, divided between the three kingdoms in the following proportions, including non-returning companies :—

	Capital Expended.	Cost per Mile of Railway.
England and Wales.....	£379,000,000	£41,033
Scotland.....	50,206,000	22,820
Ireland.....	26,394,000	14,360

Thus Ireland has made her railways for one-third the cost, and Scotland for little more than half the cost of the English railways—a result which might be partly expected from their larger proportions of single lines, the greater cheapness of land, and in Ireland the lower wages of labor.

But the English expenditure is the highest in the world, and has given rise to severe remarks on the wastefulness of the English system. Let us examine the causes of expense.

1. The English expenditure includes, on a probable estimate, no less than £40,000,000 sterling absorbed by metropolitan railways and termini. This of itself is £4,500 per mile on the 8,890 miles constructed.

It also includes very large sums for termini in Manchester, Liverpool, Leeds, Sheffield, Birmingham and other great towns, far beyond what is paid in continental cities.

2. The English expenditure also includes considerable capital for docks, as at Grimsby, where £1,000,000, was laid out by the Manchester, Sheffield and Lincolnshire Company; and at Hartlepool, where £1,250,000 was spent by a company now merged in the North Eastern.

It also includes in many instances capital expended on steamers and capital for the purchase of canals.

3. The counties whose trade and population is greatest, and which are most thickly studded with railways, as Lancashire, Yorkshire and Glamorgan, are exceedingly hilly, and necessitate heavy embankments, cuttings and tunnels, which enormously increase the cost of construction. The Lancashire and Yorkshire Railway has cost £52,400 per mile for the whole of its 403 miles. Had those counties been as flat as Belgium the company might probably have saved something like £20,000 per mile, or £8,000,000 sterling. The Manchester, Sheffield and Lincolnshire Company, even after deducting £1,000,000 for the docks of Grimsby, have spent £53,000 per mile. A flat country might have saved them a similar sum per mile, or £5,000,000 sterling.

4. England, as the inventor of railways, had to buy experience in their construction. Other nations have profited by it. There is no doubt

that our present system of lines could now be made at very much less than their original cost. In addition we have paid for experiments, such as the broad gauge and atmospheric railway.

5. The great preponderance of double lines over single (6,081 miles against 3,170), has largely increased the expense as compared with the single lines which predominate in other countries.

6. The price of land in a thickly populated country like England must necessarily be higher than in the more thinly inhabited continental countries. But beyond this, English landowners, in the first vehement opposition to railways, acquired the habit of being bought off at high prices and of exacting immense sums for imaginary damages. The first Eastern Counties line was said to have paid £12,000 per mile for land through an agricultural country, being about ten times its real value. This habit of exactation has been perpetuated to our own day. As an every day instance, I may mention that, only a few months ago, a gentleman of great wealth was selling to a railway company which he had supported in Parliament thirty acres of grass land, of which the admitted agricultural value was £100 an acre, and three acres of limestone, of which the proved value to a quarryman was £300 an acre. There was no residential damage, and the railway skirted the outside of the estate. The price of the whole in an auction room would have been about £4,000. The proprietor's agents, supported by a troop of eminent valuers, demanded £25,000!

7. Parliamentary expenses are an item of English expenditure not occurring in countries where the concession of railways is the province of a department of the government. But in those countries there is almost always a "promoter's fund" and secret service fund, which often attain very large dimensions. Which is the preferable alternative? Besides, those who object to parliamentary committees must be prepared to give us a practicable substitute, which will suit the habits and feelings of the British nation. Now, a free nation must have liberty to bring forward schemes for the public accommodation, and to have them decided by some public tribunal after full investigation and hearing all parties. There must be witnesses, and, where millions of money are at stake, there must be the power of being represented by the ablest advocates. Commissions appointed by the Board of Trade, or any other department, would be just as expensive. The expense of parliamentary committees is the price we pay for free trade in railways, and for our present amount of railway development.

I believe that these causes will fully account for the higher cost of English railways, and, except as regards the cost of land, I think that no valid or practical objection can be taken to them. There is certainly the consolation of knowing that in return for our money we have a more efficient system of railways than any other country.

#### V.—TRAFFIC AND BENEFIT OF RAILWAYS IN THE UNITED KINGDOM.

In order to appreciate the wonderful increase of traffic which has resulted from railways, it is necessary to know the traffic of the kingdom before their introduction.

Previous to the opening of the great trunk lines in 1835, passengers were conveyed by mail and stage coaches, a system which had reached a high degree of perfection. Mr. Porter, in his "Progress of the Nation," has calculated, from the stage coach license returns, the total number of miles travelled by passengers during 1834 as 358,290,000, which represented 30,000,000 persons travelling 12 miles each. The fares were very high, being by the mails 6d. a mile inside and 4d. outside, exclusive of coachmen and guards, and rather less on the stage coaches. Including coachmen and guards, the average fares paid may be taken at 5d. per mile. Hence the 30,000,000 passengers paid a total of £6,250,000.

Goods were conveyed by water or by road.

Water communication had been developed with great perseverance, and was nearly as follows:—

	Miles.
Canals—England.....	2,600
Scotland.....	225
Ireland.....	275
Navigations .....	3,100
	900
Total.....	4,000

Being one mile to every thirty square miles of country.

Canal companies always regarded with great jealousy any attempt to ascertain the amount of their traffic, and the only calculation I can find is in Smiles' "Life of Brindley" (p. 464), where it is estimated at 20,000,000 tons annually. The rates charged by canal carriers were, for the great bulk of general goods, about 4d. per ton per mile. Thus, London to Birmingham was 40s. per ton, and London to Manchester 70s. to 80s., the direct distances being 113 and 200 miles. The rates for coal were considerably less, but so high as to restrict its carriage to short distances, and to render its amount inconsiderable.

The tonnage carried by road appears to have been about one-sixth of that conveyed by canal, and may be taken at 3,000,000 tons. The rates by road were about 13d. per ton per mile, the stage wagons from London to Birmingham charging no less than £6 per ton for the 113 miles, and those from London to Leeds the enormous amount of £13 per ton for 190 miles. Assuming that each ton by road or water was carried 20 miles—a less average than at present—the total rates paid would have been nearly £8,000,000. Hence the total traffic receipts about the year 1834 may be calculated as follows:—

Passengers.....	30,000,000	— £6,250,000
Goods .....	tons 23,000,000	— 8,000,000
		£14,250,000

The effect of railways was very remarkable. It might reasonably be supposed that the new means of communication would have supplanted and destroyed the old. Singular to relate, no diminution has taken place either in the road or canal traffic. As fast as coaches were run off the main roads they were put on the side roads, or reappeared in the shape of omnibuses. At the present moment there is probably a larger mileage of road passenger traffic than in 1834. The railway traffic is new and

additional traffic. But railways reduced the fares very materially. For instance, the journey from Doncaster to London by mail used to cost £5 inside and £3 outside (exclusive of food), for 156 miles, performed in twenty hours. The railway fares are now 27s. 6d. first class, and 21s. second class for the same distance, performed in four hours. The average fares now paid by first, second and third class passengers are  $1\frac{1}{3}$ d. per mile, against an average of 5d. in the coaching days, being little more than one-fourth of the former amounts.

On canals the effect of railway competition was also to lower the rates to one-fourth of the former charges. In consequence the canal tonnage actually increased, and is now considerably larger than it was before the competition of railways. Hence the railway goods traffic, like its passenger traffic, is entirely a new traffic. The saving in cost is also very great; goods are carried by rail at an average of  $1\frac{1}{3}$ d. per ton, or 40 per cent of the old canal rates.

Now observe the growth of this new railway traffic. The following table from the Parliamentary returns (except for 1865), shows the receipts from passenger and goods traffic on railways in the following years:—

INCREASE OF TRAFFIC.

	Total Receipts.	Average Annual Increase.	Av. of whole 22 years.
1843.....	£4,535,000	£1,079,000	
1848.....	9,933,000	1,653,000	
1855.....	21,507,000	1,252,000	£1,423,000
1860.....	27,766,000	1,619,000	
1865.....	35,890,000		

Thus the average annual increase for the whole twenty-two years was £1,423,000 per annum; and the increase was largest in the latest years. The traffic in 1864 and 1865, was thus made up:—

	1864.	1865.
Passengers.....	£15,684,000	£16,572,000
Goods.....	18,331,000	19,318,000
Total receipts.....	£34,015,000	£35,890,000

And the things carried were, exclusive of carriages and animals:—

	1864.	1865.
Passengers.....	229,272,000	251,863,000
Goods, tons.....	110,400,000	114,593,000

Being six times as many as before the introduction of railways.

The increase was extraordinary:—

	1864 over 1863.	1865 over 1864.
Increase in passenger receipts.....	£1,163,000	£888,000
"    goods    "    ".....	1,696,000	986,000
	£2,859,000	£1,874,000

So that the increase in 1864 was just double the average annual increase. The increase in things carried was:—

	1864 over 1863.	1865 over 1864.
Increase in number of passengers	24,637,000	22,590,000
" tons of good.....	9,800,000	4,233,000

An increase in 1864 equal to five-sixths of the whole number of passengers in 1834, and to five-twelfths of the total goods tonnage in 1834; a wonderful proof of the capabilities and benefits of the railway system.

Now let us examine the saving to the country. Had the railway traffic of 1865 been conveyed by canal and road at the pre-railway rates, it would have cost three times as much. Instead of £36,000,000 it would have cost £108,000,000. Hence there is a saving of £72,000,000 a year, or more than the whole taxation of the United Kingdom.

But the real benefit is far beyond even this vast saving. If the traffic had been already in existence, it would have been cheapened to this extent. But it was not previously in existence; it was a new traffic, created by railways, and impossible without railways. To create such a traffic, or to furnish the machinery by which alone it could exist, is a far higher merit than to cheapen an existing traffic, and has had far greater influence on the prosperity of the nation.

Look at the effects on commerce. Before 1833, the exports and imports were almost stationary. Since that time they have increased as follows:—

INCREASE OF EXPORTS AND IMPORTS.

One Year.	Total Exports and Imports.	Per cent. Increase.	Per cent. per annum Increase.
1833.....	£85,500,000	86	4·
1842.....	116,000,000	47	6·
1850.....	171,000,000	52	10·4
1855.....	260,000,000	44	9·
1860.....	375,000,000	30	6·
1865.....	490,000,000		

I am far from attributing the whole of this increase to railways. Free trade, steamboats, the improvements in machinery, and other causes contributed powerfully to accelerate its progress. But I wish to call attention to two facts.

1. This increase could not have taken place without railways. It would have been physically impossible to convey the quantity of goods, still less to do so with the necessary rapidity.

Mr. Francis, in his "History of Railways," draws a striking picture of the obstacles to commerce in 1824, from the want of means of conveyance:

"Although the wealth and importance of Manchester and Liverpool had immensely increased, there was no increase in the carriage power between the two places. The canal companies enjoyed a virtual monopoly. Their agents were despotic in their

treatr-ent of the great houses which supported them. The charges, though high, were submitted to, but the time lost was unbearable. Although the facilities of transit were manifestly deficient, although the barges got aground, although for ten days during summer the canals were stopped by draught, and in severe winters frozen up for weeks, yet the agents established a rotation by which they sent as much or as little as suited them, and shipped it how or when they pleased. They held levees attended by crowds, who almost implored them to forward their goods. The effects were disastrous ; mills stood still for want of material ; machines were stopped for lack of food. Another feature was the extreme slowness of communication. The average time of one company between Liverpool and Manchester was four days, and of another thirty six hours ; and the goods, although conveyed across the Atlantic in twenty-one days, were often kept six weeks in the docks and warehouses of Liverpool before they could be conveyed to Manchester. 'I took so much for you yesterday, and I can only take so much to-day,' was the reply when an urgent demand was made. The exchange of Liverpool resounded with merchants' complaints, the counting-houses of Manchester re-echoed the murmurs of manufacturers."

—Vol. i, pp. 77 and 78.

This intolerable tyranny produced the Manchester and Liverpool Railway, and gave the greatest impetus to railway development.

2. The increase of imports and exports was in strict proportion to the development of railways. The following table shows the miles of railway and navigation opened, and the total exports and imports. It must be remembered that there are about 4,000 miles of navigation, and that the exports and imports had been for some time stationary before 1833 :

PROPORTION OF EXPORTS AND IMPORTS TO RAILWAYS AND NAVIGATION.

Year.	Miles of railway and navigation.	Total exports and imports.	Exports and imp's per mile.
1833.....	4,000	£85,500,000	£21,875
1840.....	5,200	119,000,000	22,884
1845.....	6,441	135,000,000	20,959
1850.....	10,733	171,800,000	16,006
1855.....	12,334	260,234,000	21,098
1860.....	14,433	375,052,000	25,985
865.....	17,289	490,000,000	28,341

Here the increase in exports and imports keeps pace with railway development from 1833 to 1845, falls below it during the enormous multiplication of railways and the railway distress from 1845 to 1850, rises again to the former level in 1855, and outstrips it after that year, aided by the lowering of fares and the greater facilities for through booking and interchange of traffic. I cannot think that this correspondence within the two increases is accidental, especially as I shall show that it exists also in France.

But, it may be said, how do exports and imports depend on the development of the railway system ? I answer, because they depend on the goods traffic ; and the goods traffic increases visibly with the increase of railway mileage and the perfecting of railway facilities. Goods traffic means raw material and food brought from ports, or mines, or farms, to the producing population, and manufactured articles carried back from the producers to the inland or foreign consumers. The exports and imports bear a variable but appreciable proportion to the inland traffic. Every mineral railway clearly increases them ; every agricultural railway

increases them less clearly but not less certainly. Hence I claim it as an axiom, that the commerce of a country increases in distinct proportion to the improvement of its railway system, and that railway development is one of the most powerful and evident causes of the increase of commerce.

Now, let us turn to the benefits which railways have conferred on the working classes. For many years before 1830 great distress had prevailed through the country. Mr. Molesworth, in his "History of the Reform Bill," says that it existed in every class of the community. "Agricultural laborers were found starved to death. In vain did landlords abate their rents and clergymen their tithes; wages continued to fall, till they did not suffice to support existence." Innumerable petitions were presented from every county in England, stating that the distress "was weighing down the landholder and the manufacturer, the shipowner and the miner, the employer and the laborer." Trade and commerce were standing still, while population was rapidly increasing, at nearly the same rate as during the most busy and prosperous period of the French war. The increase from 1801 to 1861 is given in the census:—

## ENGLAND AND WALES.

Year.	Popu- lation.	Inc. per ct. for 10 years.	Year.	Popu- lation.	Inc. per c t. for 10 years.
1801.....	8,892,536	11	1841 .....	15,914,148	14
1811.....	10,184,286	14	1851 .....	17,927,609	18
1821....	12,000,236	18	1861 .....	20,066,224	12
1831.....	13,896,797	16			

The increase during the ten years from 1821 to 1831, which included so much distress, was no less than 16 per cent, distributed pretty uniformly between the agricultural and manufacturing counties, and in itself almost a sufficient cause for the distress. But what has happened since? Increased facilities of transit led to increased trade; increased trade gave greater employment and improved wages; the diminution in the cost of transit and the repeal of fiscal duties cheapened provisions; and the immense flood of commerce which set in since 1850 has raised the incomes and the prosperity of the working classes to an unprecedented height. Railways were the first cause of this great change, and are entitled to share largely with free trade the glory of its subsequent increase and of the national benefit. But one portion of the result is entirely their own. Free trade benefited the manufacturing populations, but had little to do with the agriculturists. Yet the distress in the rural districts was as great or greater than in the towns, and this under a system of the most rigid protection. How did the country population attain their present prosperity? Simply by the emigration to the towns or colonies of the redundant laborers. This emigration was scarcely possible till the construction of railways. Up to that time the farm laborer was unable to migrate; from that time he became a migratory animal. The increase of population in agricultural counties stopped, or was changed into a decrease, and the laborers ceased to be too numerous for the work. To this cause is principally owing the sufficiency of employment and wages throughout the agricultural portion of the kingdom. If I may venture on a comparison, England was, in 1830, like a wide-spreading plain flooded with stagnant waters, which were the cause of malaria and distress. Railways were

a grand system of drainage, carrying away to the running streams, or to the ocean, the redundant moisture, and restoring the country to fertility and prosperity.

VI.—RAILWAYS IN FRANCE.

In turning from England to France, we enter a country completely different in its railway organisation. In England everything is left to individual enterprise and independent companies. In France nothing can be done without the aid of the Government. They tried the English system, and failed, just as they tried parliamentary government and failed. The independent railway companies broke down, and it was found absolutely necessary to change to a *regime* of government guarantees and government surveillance, suited to the genius of the French people, and under which they regained confidence and prosperity.

Before the introduction of railways, France possessed an extensive system of water communication, which is now of the following extent:

	Miles.
Navigable rivers.....	4,820
Canals.....	2,880
<hr/> Total.....	<hr/> 7,700

by which goods were conveyed at very reasonable rates, varying from 1d. to 2d. per ton per mile, or about half the English charges. But the delays were very great; three or four months for a transit of 150 miles was quite usual. And the canals paid scarcely 1 per cent. dividend, while their English contemporaries were paying 5 to 20 per cent.

Communication by road was also cheaper but slower than in England. The passengers paid from 1½d. to 3d. per mile, instead of the 3d. to 6d. paid in England. But they only travelled five to six miles an hour, instead of the English eight to ten. Goods paid by road about 3d. per ton per mile for ordinary conveyance, and 6d. for quick despatch, being less than half the English charges. The distances in France were greater than in England, the commerce was less, and labor and food were cheaper; thus fully accounting for the difference.

Tramways were introduced into France in 1823, by the construction of a line of eleven miles from the coal mines of St. Etienne, and this was followed by two much longer lines of a similar character, which was opened by sections between 1830 and 1834. They are dignified in French books with the title of railways, but they were really nothing but horse tramways, and were sometimes even worked by oxen.

The success of the Manchester and Liverpool Railway provoked some real though short railways in France, especially those from Paris to St. Germain and to Versailles. But in 1837 only 85 miles had been opened, against nearly 500 in England. In 1837 and 1838 the French Chambers threw out a scheme of their Government for the construction by the State of an extensive system of railways, but granted concessions to private companies for lines to Rouen, Havre, Dieppe, Orleans, and Dunkerque. These lines were abandoned for a time, in 1839, from want of funds.

In this emergency, Mr. Locke, the great English engineer, restored the fortunes of French railways. Assisted by the London and South Western Company and Mr. Brassey, and with subventions from the French Gov-

ernment, and subscriptions from English shareholders, and a powerful corps of English navvies, he recommenced, carried through the line from Paris to Rouen and from Rouen to Havre, and fairly gave the start to railway enterprise in France.

In 1842 a new law was passed, by which the State undertook the earth-works, masonry, and stations, and one-third of the price of land; the departments were bound to pay by instalments the remaining two-thirds of the land; and the companies had only to lay down rails, maintain the permanent way, and find and work the rolling stock. It was intended that three-fifths of the total cost should be borne by the state and departments and two-fifths by the companies. Under this system of subventions a number of concessions were made, the shares rose to 50 per cent. premium, and in 1848 a total of 1,092 miles had been opened. The revolution of 1848 was a terrible shock to their credit, and shares went down to half their value. Many lines became bankrupt and were sequestered, and for three years fresh concessions were entirely stopped. But the concessions already made were slowly completed, and by the end of 1851, France had opened 2,124 miles, against 6,889 opened in the United Kingdom.

In 1852 the Emperor took French railways in hand, and by a system of great wisdom, singularly adapted to the French people, he put an end to the previously feeble management, and launched into a bold course of railway development. The French public shrank from shares without a guarantee; he gave a state guarantee of 4 or 5 per cent. interest. The French public preferred debentures to shares; he authorised an enormous issue of debentures. The companies complained of the shortness of their concessions; he prolonged them to a uniform period of ninety-nine years. At the same time he provided for the interest of the state by a rigid system of government regulation and audit. And, lastly, coming to the conclusion that small companies were weak and useless, he amalgamated them into six great companies, each with a large and distinct territory; and able, by their magnitude, to inspire confidence in the public, and aid the government in the construction of fresh railways. This vigorous policy was very soon successful. Capital flowed in rapidly, construction proceeded with rapidity, and between the end of 1851 and 1857 the length of the railways opened was increased from 2,124 miles to 4,475, or more than doubled. England at that time had opened 9,037 miles.

France was now exceedingly prosperous. Her exports and imports had increased from £102,000,000 in 1850, to £213,000,000 in 1857, or more than 100 per cent in seven years. The six great companies were paying dividends which averaged 10 per cent.; and the government guarantee had never been needed. Railways united all the great towns and ports, and met the most pressing commercial wants. But the Emperor was not satisfied. France, with double the territory of England, had only half the railway accommodation, and wide districts between all the trunk lines were totally unprovided with railways. The government engineers of the *ponts et chaussées* were prepared with plans and estimates for 5,000 miles of lines, which had been inquired into, and officially declared to be *d'utilité publique*, *i. e.*, a public necessity. The country districts clamoured for these lines. But how were they to be made? The public were not prepared to subscribe for them, the Government could not undertake them, and the great companies were too well satisfied with their 10 per cent. dividend to wish to endanger it by unremunerative branches.

The plan of the Emperor was intricate but masterly. He said to the companies : " You must make these lines. The 4,525 miles of railway already made shall be a separate system for the present, under the name of *Ancien Reseau*, the old lines. You no longer require the guarantee of the State for these lines. But I will give you an extension of the ninety-nine years of your concessions, by allowing them to commence at later dates ; beginning with 1852 for the Northern Company, and at various dates for the rest, up to 1862, for the Southern Company. I also engage that £9,000,000 sterling of the net revenue of these old lines shall for ever be divisible among the shareholders, without being liable for any deficit of the extension lines, an amount which will give you a clear and undeviable dividend of 6 to 8 per cent. ; with a strong probability—almost a certainty—of getting much more from surplus traffic."

" Next the new lines, 5,128 miles in length, shall be a separate system, under the name of *Nouveau Reseau*, or extension lines. Their estimated cost is £124,000,000, and you, the companies, may raise this sum by debentures, on which the Government will guarantee 4 per cent. interest, and .65 sinking fund for paying them off in fifty years. Any extra cost you must pay yourselves."

These, in their briefest possible form, are the terms on which the Emperor imposed an average of nearly 1,000 miles per company on the six great companies of France. They were accepted with considerable reluctance. Their effect has been to lower the value of the shares of the great companies, for the bargain is considered disadvantageous. The companies cannot borrow at less than 5.75, so losing 1.10 per cent. per annum on every debenture ; and as the lines cost more than the £124,000,000., the overplus has been raised by the companies by debentures, for which they alone are responsible. But on the other hand, they get an immense amount of fresh traffic over their old lines, which must ultimately more than repay this loss. English Railways would be thankful if their extensions cost them so little.

In the following years other lines were added, with similar guarantees and with considerable subventions from the State, and in 1863 an additional series of lines, 1,974 miles in length, were imposed on similar terms, but with some modifications of the conventions with two of the weakest companies.

Besides the Government lines, the Emperor encouraged to the utmost the efforts of the departments, and in July, 1865, a law was passed respecting *chemins de fer d'intérêt local*, which authorised departments and communes to undertake the construction of local railways at their own expense, or to aid concessionaires with subventions to the extent of one-fourth, one-third, or in some cases one-half the expense, not exceeding £240,000.

Not content with passing this law, the minister of public works, in the very next month wrote to the prefets of the 88 departments of France, to acquaint them fully with its provisions, and to invite them to communicate with their councils general, and deliberate upon the subject. The result was that sixteen councils requested their prefets to make surveys and inquiries to ascertain what lines would be advisable. 32 departments authorized their prefets to prepare special plans, and even to make provisional agreements with the companies to carry out lines, subject to confir-

mation by the councils. Two of these made immediate votes, viz., the department of Ain, £56,000, and Herault, £260,000 for lines which they approved. A third, the department of Calvados, voted subventions amounting to £1,000 per mile for one line, and £2,000 per mile for another line. Besides, these five departments put railroads into immediate execution by contracts with independent companies. Among these were :

	Subvention.
Saone et Loire.....	£14,000
" (besides the land). ..	40,000
Manche (with an English company, and including land).....	40,000
Rhone .....	240,000
Tarn.....	171,000

By these measures the Emperor has brought up the concessions to the following total :

	Miles.
Ancien Reseau, or old lines .....	5,927
Nouveau " or extension lines.....	7,565
	12,592

Being very nearly the length of our constructed lines in 1864.

But of this mileage there has been constructed up to the present time only... 8,184

Leaving still unconstructed..... 4,458

being one-third of the whole concessions. Of this, 1,800 miles are now being constructed, and 1,600 miles are expected to be opened by the end of 1867.

Hence the lines constructed in France up to and including 1865, are 8,134 miles, or about the same length as the lines constructed in the United Kingdom to the end of 1855; so that France is ten years behind England in actual length of railways constructed, and at least fifteen years behind England if her larger territory and population are taken into account; and I must add that France would have been very much farther behind had it not been for the vigorous impulse and the wise measures of the Emperor Napoleon.

The progress of completion from 1837 to the present time is shown in the following table :

Year.	MILES CONSTRUCTED.	Average annual	
		Miles open.	Increase.
1837.....	85		84
1840.....	338		84
1845.....	508		259
1850.....	1,807		301
1855.....	3,315		454
1860 .....	5,586		509
1865 .....	8,134		

This table shows the insignificant rate of progress up to 1845, and the

larger but still slow progress up to 1855. From that time the effect of the Emperor's policy becomes visible in the increased rate of progression. It is expected that between 1852 and 1872 more than 9,500 miles will have been opened, quadrupling the number constructed in the previous twenty years, and contributing in the highest degree to the prosperity and wealth of the French nation.

Railway history in France may be briefly summed up in four periods:

1. The period of independent companies from 1831 to 1841.
2. The period of joint partnership of the State and the companies from 1842 to 1851.
3. The period of Imperial amalgamations and guarantees from 1852 to 1857.
4. The period of guaranteed extension lines from 1858 to the present time.

[To be Continued.]

### CENTRAL RAILROAD OF NEW JERSEY.

This road extends from Phillipsburg, on the Delaware, to Elizabethport, on the waters of the harbor of New York, a distance of 64 miles, with an extension to Jersey City, opposite New York (opened in 1864), a further distance of 10 miles. It is, throughout, a double track road, and a third rail is laid between the junction of the Delaware, Lackawanna and Western Railroad, at Hampton, to Elizabethport, for the accommodation of the wide cars of that line. A third track is about to be laid between Elizabeth City and Jersey City, the traffic on this portion of the line having increased beyond the capacity of the two existing tracks. During the past year a stock yard and market, covering 40 acres, has been opened at Communipaw, and the new coal depot at Port Johnston has been brought into use. The works of the American Dock and Improvement Company are also being carried on with energy and success. Though the stock yard and dock properties belong to separate organizations, the Central company own the largest interest therein, and exercise full control over both. The improvements made by the company during the past three years have more than doubled its capital account: but the increase of business in consequence of their completion has been sufficient to ensure the continuance of the usual 10 per cent. dividend. It is not intended to make further new expenses on account of construction, but simply to finish up the work on hand.

The amount of rolling stock owned by the company at the close of each of the last five fiscal years is shown in the following statement:

	'62. '63. '64. '65. '66.		'62. '63. '64. '65. '66.
Engines.....	38	51	59
Passenger cars.....	20	22	34
Mail, express, &c., cars....	7	7	11
	65	65	58
	83		
			246
			307
			313
			363
			434
			200
			200
			360
			461
			560
			29
			30
			71
			71
			71

—the four and six wheel cars being reduced to their equivalent in eight wheel cars.

The receipts and expenses on account of operating the road and ferries of the company for the same years were as follows:

	1862.	1863.	1864.	1865.	1866.
Passenger earnings.....	\$236,305	\$287,939	\$488,224	\$688,774	\$762,471
Merchandise .....	481,977	605,385	731,722	898,287	1,099,239
Coal .....	661,351	1,021,152	1,317,964	1,888,493	1,619,744
Mails, express, rents, &c.....	24,024	27,530	39,284	60,886	99,700
Total earnings.....	\$1,397,587	\$1,941,976	\$2,537,184	\$3,036,390	\$3,581,244
Operating expenses.....	623,245	814,732	1,231,554	1,748,438	1,963,976
Nett earnings.....	\$774,342	\$1,127,244	\$1,305,630	\$1,287,953	\$1,617,268

From which were disbursed the following:

Taxes—United States.....	\$8,263	\$21,731	\$49,602	\$90,042	\$111,148
" State .....	24,523	24,576	26,417	31,919	36,908
" Interest.....	142,512	147,712	155,184	170,859	215,784
Renewals, &c .....	175,723	186,568	.....	194,156	106,854
Dividends, 10 per cent.....	363,000	401,578	569,578	861,676	1,146,484
Surplus .....	66,321	365,029	504,904	.....	.....

An extra dividend of 10 per cent was paid from the renewal fund or surplus earnings as found at the end of 1863. This amounted to \$515,000, leaving in the fund named \$63,255, to which was added \$60,000 premium on new stock issued—making the true balance at the end of 1863 \$123,255, and with the surplus of 1864 a total of \$628,159, at which amount the renewal fund still remains.

The following statements exhibit the operations on the road and ferries for the same five years:—

	1862.	1863.	1864.	1865.	1866.
Miles run by engines hauling trains—					
Passenger .....	201,333	214,483	290,641	431,334	448,545
Merchandise.....	146,186	187,159	177,688	230,361	292,110
Coal .....	309,368	383,451	415,742	393,693	496,160
Wood and Gravel.....	29,872	26,947	63,949	132,590	140,210
Total on Central Railroad.....	687,504	812,041	948,218	1,187,978	1,375,025
Total on New Jersey Railroad.....	58,584	59,164	(abandoned).		
Aggregate miles run by trains .....					
Miles run by ferry boats.....	740,788	871,205	948,218	1,187,978	1,375,025
Passengers and tonnage carried—					
Passengers.....	419,803	529,017	698,808	928,806	1,083,592
Merchandise (2,000 lbs).....	196,985	263,625	272,266	317,181	434,002
Iron (2,240 lbs).....	70,202	80,853	69,225	75,469	103,009
Coal (2,240 lbs) .....	502,375	613,964	675,743	494,687	778,173
Lackawanna .....	314,195	485,927	474,221	509,819	511,076
Lehigh .....					
	1862.	1863.	1864.	1865.	1866.
Mileage of passengers and tonnage—					
Passengers.....	11,759,879	13,181,971	19,397,515	23,831,715	25,866,378
Merchandise .....	11,168,060	13,540,017	14,610,805	17,338,585	24,045,007
Iron.....	4,487,108	6,172,456	4,430,400	4,830,016	6,592,512
Coal.....	43,447,732	56,795,557	62,372,269	55,683,624	69,421,516

The gross receipts per mile run by trains and the cost of operating are shown in the following table:—

	1862.	1863.	1864.	1865.	1866.
Passenger trains.....	\$1 26	\$1 47	\$1 54	\$1 73	\$1 70
Merchandise trains.....	3 29	3 23	4 12	3 88	3 76
Coal trains.....	2 14	2 66	3 16	3 52	3 28
Average of all trains.....	\$2 12	\$2 47	\$2 83	\$2 87	\$2 90
Expenses per mile run.....	0 92	1 11	1 39	1 66	1 59
Profits per mile run.....	\$1 20	\$1 36	\$1 44	\$1 21	\$1 31

The financial condition of the company as shown on the general balance sheet at the close of each fiscal year reads as follows:—

	1862.	1863.	1864.	1865.	1866.
Capital stock.....	\$3,630,000	\$4,620,000	\$6,500,000	\$10,685,940	\$13,000,000
Funded debt.....	2,000,000	2,000,000	2,000,000	1,509,000	1,500,000
Dividend payable January 1 proximo ..	90,750	110,355	159,118	261,711	299,293
Interest accrued.....	47,833	47,833	47,833	33,250	33,250
Accounts payable.....	320,424	292,277	429,309	543,665	250,400
Renewal fund (balance).....	233,176	638,255	628,159	628,159	628,159
Total.....	\$6,322,193	\$7,708,880	\$9,764,509	\$13,661,735	\$15,111,192

—accounted for, as shown in the following exhibit:

Railroad .....	\$4,490,897	\$4,592,747	\$4,832,675	\$6,106,957	\$6,794,306
Extension to Jersey City.....	...	253,136	686,336	187,011	318,377
Port Johnston coal wharves.....	...	...	...	...	...
Stations, shops, &c.....	132,000	136,000	167,166	218,736	298,421
Lands and works at Elizabethport .....	302,355	302,476	302,476	301,833	301,976
Ferry interest and boats.....	217,050	307,150	554,343	604,537	556,551
Engines.....	320,000	467,500	535,765	635,000	931,000
Passenger cars.....	49,000	52,500	84,450	176,000	199,000
Freight cars .....	137,678	153,000	196,800	211,250	20,950
Coal cars.....	90,864	100,000	211,523	211,523	533,650
Communication filling and bulkheads.....	...	...	255,273	585,119	4,417,979
Lands, docks, mach'y, &c.....	375,511	820,967	1,405,655	3,845,525	3,845,525
Iron and ties on hand.....	32,900	64,238	81,125	59,177	86,411
Materials & fuel on hand.....	46,652	35,607	41,525	62,197	189,787
Cash & acc'ts receivable.....	123,286	424,579	339,497	406,497	787,694
Total .....	\$6,322,193	\$7,708,880	\$9,764,509	\$13,661,735	\$15,111,192

The following table shows the relation of capital, earnings, &c.:

	1862.	1863.	1864.	1865.	1866.
Capital per mile of road.....	\$57,970	\$103,437	\$114,363	\$164,796	\$195,946
Earnings " "	21,837	30,343	34,286	41,032	48,395
Expenses " "	9,738	12,730	16,642	23,627	26,540
Profits " "	12,099	17,613	17,644	17,405	21,385
Expenses to earnings, per cent. ....	44.67	41.95	48.51	57.62	54.84
Profits .....	55.33	58.05	51.49	42.38	45.16
Profits to capital and debt, p. c. ....	13.75	17.03	15.35	10.56	11.15

The market value of the company's stock, based on the monthly range of selling prices at New York, is shown in the following statement:

	1862.	1863.	1864.	1865.	1866.
January .....	114@119	114@119	114@119	114@119	114@119
February .....	130@122	170@170	175@175	113@114	113@114
March .....	175@175	175@175	113@114	104@107½	104@107½
April .....	114@119	114@119	114@119	106½@110	110@117
May .....	114@119	114@119	114@119	114@119	114@117
June .....	114@119	114@119	114@119	115½@117	115½@117
July .....	130@130	114@119	114@119	116@120	116@120
August .....	114@119	165@165	114@119	120@124	120@125
September .....	114@119	114@119	114@119	122@125	127@129
October .....	150@150	114@119	114@119	122@123½	127½@130
November .....	150@150½	114@119	114@119	120@123½	128@132½
December .....	155@155	114@119	114@119	118@122	124@127
Year .....	114@155	165@175	175@175	118@125	104@132½

The sale-prices for the first six months of 1867 have been as follows: January, 124@125; February, 120@123; March, 116@118; April, 113½@115½; May, 115@118½; June, 117½@120. Half year, 113½@125.

The last notice of this railroad will be found in Vol. LIV. page 450.

## THE PREVENTION OF RAILROAD ACCIDENTS.

Although we now travel by rail in this country more securely and more swiftly than ever before, it is generally admitted, we believe, by our most experienced railroad men that more than half of the mortality and injury to passengers arising from railroad accidents might be prevented if due precautions were used by the companies in the construction of their cars, in the repairs of their roads, and in the running of their trains. How far this conviction is shared by the public is evident from the ample damages often awarded when any company is sued in the courts by passengers who have sustained injuries.

An examination of the details of railroad accidents shows that among the most important guarantees of safety, there are two or three which may very properly be made the subject of legislation. The first is the prevention of collision. By the free use of the telegraph it seems to us possible that no train should ever, by night or day approach within a certain distance of another train on the same line of rails. With suitable bye-laws carried out and enforced by a sufficient body of watchmen stationed at suitable intervals along the line of road, the collision of trains might probably be rendered almost impossible, and one of the most frequent dangers of the sacrifice of life would thus be averted from railroad travellers. We are aware that some of our great railroad companies are making great efforts in the direction indicated, but economy induces others to be more remiss, and some uniformity of precautionary provisions might be secured by a wisely framed statute applying to all the roads. In the Convention at Albany, ten days ago, some such measure, we believe, was brought up in the Convention. But this matter is clearly one to be acted on by the Legislature, and not by a Convention assembled to revise the organic law of the State Government. We understand, however that the project finds favor in some influential quarters to appoint a Railroad Board, armed with authority, and held under obligations to take the supervision of these and other matters affecting the relations of the railroads to the public. By whatever means it be effected, however, the frequency of collisions ought to be and may be greatly diminished.

A second cause of railroad accidents arises from the condition of the road. The demand for rapid travelling has on the European railways made it obligatory on the various companies to keep the rails, ties and sleepers in perfect order, and to subject them to frequent inspection. In the leading roads of England we believe every mile of the rails from one end of the track to the other is examined at least once a day by mechanics whose sole business it is to walk along the road for this purpose, each man having a certain length of track allotted him, for the safety of which he is responsible and the condition of which he has to report from actual examination at certain intervals. Were some such arrangement perfected here, rare would be the accidents from rotten ties or broken rails, and the economy of the plan would be promoted if steel rails were generally adopted as is being done we believe to a limited extent on the Erie, Hudson, Harlem roads, and by some of the more enterprising companies in the Western States. The accident a week

ago on the first mentioned road near Elmira arose we are told from rotten ties which allowed a displaced rail to throw the engine off the track. This catastrophe might probably have been avoided altogether had the road bed been more thoroughly examined just as its mortality to the passengers was prevented by other precautions, to which we shall presently advert. We are aware of the difficulties against which our railroad companies have to contend and appreciate the efforts making to meet the demand for rapid and cheap transportation of passengers and merchandize. We do not urge the adoption of such legislation as would fetter the railroad companies or hinder any well devised efforts they may contrive to fulfil their important duties to the community, but we would urge on them the necessity of adopting voluntarily every well-tested improvement tending to prevent loss of life, knowing as we do that if omitted such expedients will before long be enforced by public opinion and by law.

But the precautionary measures should not stop at the security of the road bed and the prevention of collision between trains traversing it, for after we have put in operation the most approved preventives with the greatest possible care accidents will sometimes occur, and our railroad companies must see to the safety of the passengers whose lives are entrusted to their keeping by adopting any improvements in the construction of their cars which may conduce thereto. In this point of view there are two principal dangers which have to be guarded against—the “telescoping” of cars into each other in case of collision, and the falling of passengers in passing from car to car when the train is in motion. At the last session of the Legislature of this State a law was introduced to guard against the latter of these two evils, and it was finally passed on the 22d of April last. The provisions of this statute are not generally known. We therefore give them from an official copy of the law as follows:

SECTION 1. It shall be the duty of every railroad company or corporation in this State, and every railroad company or corporation running, or that may hereafter run its passenger cars in this State, to cause the platforms upon the ends of all passenger cars to be so constructed that when said cars shall be coupled together, or made up into trains and in motion, danger of injury to persons or loss of life between the ends of said cars, by falling between the platforms of said cars while passing from one car to another, shall, so far as practicable, be avoided.

SEC. 3. This act shall not operate or be construed to exempt railroad companies or corporations from liability for damages to persons who may be injured or sustain loss or damage by or through any neglect to comply with the provisions of this act.

SEC. 4. Time shall be allowed to all railroad companies or corporations to comply with the provisions of this act as follows, to wit: One quarter of all the said cars of each of said companies or corporations shall be made to conform to the requirements of this act within three months from and after the passage of this act, one other quarter thereof within six months, one other quarter thereof within nine months, and the remaining one quarter thereof within one year from and after the passage of this act.

Several plans have been adopted and brought into use for complying with this law. That which seems to be regarded with the most favor as best meeting the conditions of the problem is known as the Miller platform, which some eighteen months ago was adopted by the Erie railroad, and is now being introduced, we believe, by the Hudson River road in this State, as well as on several Western roads.

This new coupling apparatus unites the ends of the cars so that only a few inches intervene between the two contiguous "platforms" however rapidly the cars are travelling. It is also adjusted to prevent the dangerous swaying motion, and while it grasps the cars so firmly together that a force of 7,000 pounds cannot tear them asunder, it is so elastic that there is no more than the average loss from "slippage," and no force that has yet been applied has ever caused them to telescope into each other. To the safety conferred by this apparatus was ascribed the fact that during the past eighteen months no passenger's life has been lost on the Erie railroad, and in the recent accident to which we have referred above not a single passenger was hurt although the train was going at full speed at the time.

### DEBT AND FINANCES OF SAN FRANCISCO.

The public debt of San Francisco, as stated in the report of the City Auditor, at the end of the fiscal year 1865-'66, and as it stood on the 9th April, 1867 (according to a special statement furnished us by the same gentlemen), is shown in the following statement:

Description of securities.	Interest		Principal payable.	Am't outstanding July 1, '66.
	Rate.	Payable.		
City Bonds of—				
1851.....	10	May & Nov.	May 1, '71	\$1,289,900 \$1,257,900
1854*.....	10	Jan. & July.	Dec. 1, '66	174,500 .....
1855*.....	6	" "	Jan. 1, '77	305,500 270,500
City & County Bonds of—				
1858.....	6	Jan. & July.	Jan. 1, '88	1,133,500 1,133,500
1860 (School)*.....	10	" "	July 1, '70	55,500 54,500
1861 ("")*.....	10	" "	July 1, '70	18,000 16,000
1851 & '63 (S. F. & S. J. RR.).....	7	Various.	Var. '77-'78	300,000 277,000
1863 (Judgment).....	7	Ap'l & Oct.	Oct. 1, '83	917,386 852,000
1864 ("").....	7	June & Dec.	June 1, '84	28,000 28,000
1864 (Can. Pac. RR.).....	7	Jan & July	July 1, '94	400,000 400,000
1865 (West' Pac. RR.).....	7	May & Nov	May 1, '95	250,000 250,000
1866 (School).....	7	Ap'l & Oct.	April 1, '81	75,000 60,000
1867 ("").....	7			200,000

The interest and principal of the bonds marked thus (\*) are payable in gold by Messrs. Lees & Waller in New York. All others are payable in San Francisco.

The coupons of the bonds of 1858, the judgment bonds of 1863 and 1864, and the school bonds of 1866, are receivable for taxes of the current year.

The amount of debt July 1, 1866, as above.....	\$4,947,294
Coupons then due and not presented.....	68,420
<b>Total amount of indebtedness.....</b>	<b>\$5,015,714</b>
Sinking and other funds, per contra.....	1,133,916
<b>Net amount of debt.....</b>	<b>\$3,881,798</b>

The receipts and expenditures for the fiscal year 1865-'66 were as follows:—

	RECEIPTS.
Assessed taxes.....	\$1,361,876 26
Poll tax—General fund.....	\$13,170 24
" School fund.....	2,314 75— 15,884 99
State and county licenses.....	89,253 25
Municipal licenses.....	28,799 25

Harbor dues .....	20,136 58
Fines .....	41,970 66
Sales of property .....	4,100 55
" bonds (school) .....	\$61,050 00
Rents (school) .....	1,225 50
Sundries (school) .....	610 75— 62,886 25
Total on all accounts .....	\$1,624,408 06

## EXPENDITURES.

Current expenses .....	\$1,085,941 96
Paid by fees .....	\$116,977 86
Returned by state .....	52,029 65— 169,007 51— \$916,934 45
Permanent improvements .....	98,145 90
Sales of property .....	7,150 00— 90,955 90
Interest on debts .....	295,276 71
Sinking funds, &c. .....	139,078 83— 256,198 88
Reduction of debt .....	154,055 00
Old claims .....	19,097 47
Net payments .....	\$1,437,281 20
Paid with means obtained from other sources than per contra .....	315,235 84
	\$1,752,517 04

The rates of taxation (cents per \$100) in the city and county, since the consolidation of 1856, for state as well as local purposes, are shown in the following statement:—

For what purpose.	56-'7	57-'8	58-'9	59-'60	60-'1	61-'2	62-'3	63-'4	64-'5	65-'6	66-'7
State .....	70	70	60	60	60	62	77	90	125	115	113
General fund .....	125	125	125	65	75	75	70	42 $\frac{1}{2}$	61	70	67 $\frac{1}{2}$
Street light fund .....	—	—	15	15	15	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	15
Street department fd. ....	35	35	35	35	35	35	35	20	35	35	35
School fund .....	—	25	95	100	100	85	45	47	43	38 $\frac{1}{2}$	—
Corporation debt fd. ....	—	—	—	—	—	—	—	5	2 $\frac{1}{2}$	2	—
Int. (S.F. & S.J. RR) .....	—	—	—	—	—	—	—	—	17 $\frac{1}{2}$	10	—
" (bonds of '63-'64) .....	—	—	—	—	—	—	—	—	—	8	—
" (Pa'lic RR. bds) .....	—	—	—	—	—	—	—	—	—	3	5
Skg. fd. (bonds of '55) .....	—	—	—	—	—	—	—	—	—	2 $\frac{1}{2}$	7 $\frac{1}{2}$
" ( " '63-4) .....	—	—	—	—	—	—	—	—	—	—	—
" (SF. & SJ. RR bds) .....	—	—	—	—	—	—	—	—	—	—	—
" (Pacific RR bds) .....	—	—	—	—	—	—	—	—	—	—	—
Judgment fund .....	—	—	46	—	—	—	—	—	—	—	—
Total (cts. p \$100) .....	230	230	245	316	285	287	274 $\frac{1}{2}$	210	208	312	310

## RAILROADS OF THE WORLD.

The following statement, which we have compiled from the most authentic sources accessible, shows the length of railroad constructed and in operation at the end of 1866 in each country into which they have been introduced, and their relation to the extent and population of the countries respectively. We believe it to be as nearly accurate as it is possible to make such a summary:

Countries.	Miles of railroad.	Area, sq. m.—		Population.—	
		Absol'te.	of R. R.	To mile	Absol'te.
<b>NORTH AMERICA:</b>					
Canada .....	2,148.5	357,822	166	3,091,440	1,489
New Brunswick .....	198.2	27,704	140	295,084	1,489
Nova Scotia .....	92.8	18,746	202	368,781	3,974
United States .....	36,896.3	3,001,002	81	36,896,300	1,000
Mexico .....	78.3	772,672	9,863	8,259,080	105,480
<b>WEST INDIES:</b>					
Cuba .....	396.5	47,278	119	1,419,264	3,650
Jamaica .....	13.8	6,250	453	441,264	198
<b>SOUTH AMERICA:</b>					
Venezuela .....	32.0	426,700	13,834	1,565,000	48,906
New Granada .....	47.5	521,900	10,987	2,797,473	58,894
British Guiana .....	59.9	96,300	1,608	155,026	2,583

Countries.	Miles of railroad.	Area, sq. m.		Population.	
		Absol'te. of R. R.	To mile	Absol'te. of R. R.	To mile
Brazil.	433.3	2,973,400	68,599	10,045,000	23,198
Paraguay.	46.2	86,200	1,866	1,337,431	28,895
Peru.	55.3	498,700	9,013	2,500,000	45,200
Chili.	336.7	249,900	742	1,714,319	5,091
Argentine Republic.	231.0	1,125,300	4,876	1,459,355	6,319
<b>EUROPE:</b>					
Gt. Britain & Ireland.	13,286.0	122,550	9	29,070,936	2,189
France.	8,982.5	213,200	24	37,472,732	4,172
Spain.	3,116.4	189,350	60	16,031,267	5,144
Portugal.	433.3	35,250	81	3,987,861	9,296
Switzerland.	824.2	15,270	18	2,510,494	8,167
Italy.	3,213.2	109,780	34	24,269,62	7,553
Austria.	3,830.9	240,250	62	32,573,002	8,502
S. Germany (elsew'e).	2,540.1	44,520	17	8,523,460	3,355
Prussia.	5,794.8	135,40	23	23,577,939	4,068
N. Germ'y (elsew'e).	1,092.5	24,677	23	5,670,394	5,198
Belgium.	1,595.1	11,400	7	4,940,570	3,099
Holland.	700.7	13,600	19	3,735,682	5,336
Denmark.	295.1	14,720	50	1,608,095	5,451
Sweden.	1,023.4	170,099	166	4,114,141	4,021
Norway.	43.5	123,228	2,883	1,701,478	3,911
Russia.	2,775.2	1,565,200	564	65,863,181	23,734
Turkey in Europe.	170.6	203,380	1,189	15,700,000	91,713
<b>ASIA:</b>					
Turkey in Asia.	142.9	668,900	4,608	16,000,000	111,966
British India.	3,319.1	1,465,300	43	180,500,000	53,418
Java.	101.4	51,300	508	13,917,000	13,724
Ceylon.	36.9	24,660	616	2,342,998	63,470
<b>AFRICA:</b>					
Egypt.	281.2	659,000	2,345	7,465,000	26,650
Algeria.	27.7	85,500	303	3,000,000	108,300
Cape Colony.	84.5	104,930	159	267,100	4,140
Natal.	2.0	14,400	7,200	156,200	78,100
<b>AUSTRALASIA:</b>					
Victoria.	331.5	86,940	262	574,331	1,732
New South Wales.	145.5	323,487	2,230	378,935	2,613
South Australia.	73.5	388,328	5,215	140,416	1,900
Queensland.	41.2	678,000	15,998	59,712	1,449
New Zealand (Canterbury).	16.5	106,259	6,440	175,357	10,627

The following is a recapitulation of the above table, so far as length of railroad is concerned; but as relates to area and population, substituting the total of each grand division for those of the countries named above:

Divisions.	Miles of railroad.	Area square mile.		Population.	
		Absolute.	To mile	Absolute.	To mile
North America.	139,414.1	7,600,000	192.8	52,000,000	1,309.3
West Indies.	420.3	100,000	243.7	3,500,000	8,529.8
South America.	1,041.9	7,100,000	6,814.4	22,500,000	21,595.1
Total America.	40,866.3	14,800,000	362.1	75,000,000	1,908.6
Europe.	50,117.5	3,600,000	71.8	285,000,000	5,686.6
Asia.	3,660.3	17,400,000	4,753.7	780,000,000	213,097.3
Africa.	375.4	11,700,000	31,166.7	200,000,000	532,765.1
Australasia.	607.7	3,200,000	5,265.7	1,600,000	2,532.8
Total of world.	95,727.2	50,700,000	530.2	1,844,600,000	13,908.8

### IRELAND FOR 1866.

A Parliamentary return, giving information on the subject of agriculture for the year 1866 has just been received, and I extract therefrom such features as seem to have general interest in this country and abroad.

The area under the principal cereal crops in 1866, which amounted to 2,159,199 acres, decreased by 40,211 acres compared with 1865; and the dimi-

nution in the average yield per acre was: In wheat, 1.7 cwt.; oats, 0.3 cwt.; rye, 0.1 cwt. Barley and bere gave an increase yield, the former of 0.8 cwt. and the latter of 0.5 cwt. per acre. The cereal crops (wheat, oats, barley, bere and rye) produced 8,776,262 quarters, being a net falling off in the yield of 474,618 quarters in 1866 compared with the previous year. This was owing not only to a diminished acreage, but also to a decrease in the estimated average acreable yield in 1866.

In green crops there was an increase in the produce of turnips, mangel wurzel and cabbage, but a large decrease in the yield of potatoes. Taken together, potatoes, turnips, mangel wurzel and cabbage in 1866 produced 7,487,741 tons, showing a net deficiency in the total yield from these crops of 222,121 tons compared with the previous year. This was caused by a decrease in the acreage under potatoes and also by a considerable diminution in the yield of that crop, amounting to seven-tenths of a ton per acre.

Flax, notwithstanding a less acreable yield, shows a greater total produce of 1,430 tons. This is due to an increased area of 12,074 acres in 1866. Hay exhibits a decrease in acreage of 77,070 acres. We present a table giving the total extent under each of the principal crops in 1865 and 1866, and the increase or decrease in the latter year.

Crops	Extent Cultivated in—		Inc. or Dec in 1866.—	
	1865.	1866.	Increase.	Decrease.
Wheat	266,989	299,190	32,201	45,533
Oats	1,745,293	1,699,695	...	26,809
Barley	177,102	150,293	...	70
Bere and Rye	10,091	10,021	...	15,907
Potatoes	1,066,260	1,053,353	...	17,014
Turnips	334,212	317,198	...	...
Mangel Wurzel	14,389	20,082	5,693	...
Cabbage	36,623	36,531	2,909	...
Flax	251,483	263,507	12,074	...
Hay	1,678,493	1,601,423	...	77,070
Total decrease			129,526	

The economical changes which have taken place in Ireland even since 1857 may be perceived at a glance by comparing the estimated total produce of that year with that of 1865 and 1866. The great decrease in the cultivation of wheat and the great increase in that of flax seem to be the most noticeable features:

Crops.	Estimated Produce.			Inc. or Dec. 1866.—	
	1857.	1865.	1866.	Inc.	Dec.
Wheat	1,662,957	826,783	805,710	...	21,073
Oats	8,595,347	7,659,737	7,284,835	...	374,892
Barley	849,783	732,017	654,980	...	77,037
Bere	28,553	18,989	11,016	...	2,973
Rye	49,252	8,364	19,721	1,357	...
	Tons.	Tons.	Tons.	Tons.	Tons.
Potatoes	3,509,544	3,865,990	3,068,594	...	797,396
Turnips	4,360,197	3,301,683	3,786,462	484,779	...
Mangel Wurzel	298,515	191,987	250,322	58,375	...
Cabbage	327,875	350,252	382,363	32,111	...
Flax	14,475	39,561	40,991	1,430	...
Hay	2,568,644	3,068,707	2,878,622	...	190,085

The interruption of the cotton supply in 1861-2 gave an impetus to the cul-

ture of flax in Ireland. This impetus is measured by the number of scutching mills in operation in 1866 as compared with the number in 1861 :

Provinces.	1861.	1866.
1—Ulster.....	1,013	1,393
2—Leinster.....	13	49
3—Munster.....	7	39
4—Connaught.....	4	32
Ireland .....	1,037	1,513

The number of emigrants who left the Irish ports in 1866 was 101,251, being a decrease of 1,845 on the returns for 1865.

The number of males who emigrated in 1866 was 60,688, being an increase of 4,482 over the previous year. Of females there were 40,563, being a decrease of 6,327 compared with 1865. The suspension of the habeas corpus act doubtless accelerated the emigration of the male part of the population. We present a table showing the numbers contributed by each province to the aggregate emigration :

Emigrants from. Provinces.	Males.		Females.		Total.	
	1865.	1866.	1865.	1866.	1865.	1866.
Leinster.....	11,059	9,915	9,465	7,464	20,524	17,379
Munster.....	20,490	21,359	16,936	15,612	37,426	36,971
Ulster.....	12,744	17,802	9,557	8,457	22,301	26,259
Connaught.....	6,139	6,735	6,338	5,714	12,477	12,439
From what province not stated.....	4,783	3,700	3,987	2,659	8,760	6,419
Persons belonging to other countries .....	492	1,127	607	657	1,59	1,784
Total.....	56,206	60,688	46,890	40,563	103,096	101,251

Increase or decrease in 1866

Increase. 4,482      Decrease. 6,327      Decrease. 1,845

Of the 1,784 emigrants from Ireland not belonging to Ireland, 1,073 were natives of South Britain, 604 of North Britain, 49 of the Continent of Europe, 55 of the United States, Canada and the West Indies, and three of Africa, Australia and the East Indies.

In respect to age, nearly 75 in every 100 of the persons who left Ireland were between 15 and 35 years of age. In 1865 the proportion per cent for these ages was 64.7.

The same Parliamentary return gives information on the meteorological phenomena of Ireland, as registered at the Ordnance Survey Office in Phoenix Park. Height above the sea, 158.8 feet. The barometer stood highest in 1866, on the 24th of January, at 9:30 A. M.—wind S. W.—when it was 30,673 inches; it was lowest at 9:30 P. M. on the 23d March—wind S. E.—when it was 28,663 inches. The highest temperature in the air during the year was 80.7 degrees of Fahrenheit, on the 13th of July, and the lowest 17.5 degrees, on the 1st of March. Rain or snow fell on 216 days. The greatest quantity of rain which fell in a day (twenty-four hours) was 9.75 inches, on the 18th of June—the wind being N. W. The point from which the wind chiefly prevailed was from the westward; it blew from that direction 107 days, with an average pressure 2.83 lbs. per square foot. The strongest wind was from the S. W., on the 6th of December, when the pressure was 25 lbs. per square foot.

## LLOYD'S LIST OF WRECKS AND CASUALTIES.

The "Committee for Managing the Affairs of Lloyd's," in London, appointed a Statistical Committee in March, 1866, who have lately published their "First Annual Analysis of the Wrecks and Casualties reported in *Lloyd's List* for the year 1866." The object of the publication, which will hereafter appear annually, is to present a comprehensive and careful summary of losses and casualties, containing all available information relating to accidents; and the work cannot fail to be of value to all parties interested in the mercantile marine of the world. The date of this first report is 23d April, 1867, in the preface to which it is stated "that the results of casualties as at first stated are very frequently modified by subsequent events, of which information is only obtained after greater or less intervals, and that a period of three months is allowed to elapse for the purpose of securing all possible accuracy."

It appears from the monthly summary of "Wrecks and Casualties" reported in *Lloyd's List* as having occurred in 1866, that they were as follows:

Wrecks—Ships .....	9,558	Casualties—Ships.....	10,627
Steamers .....	1,029—10,587	Steamers .....	1,084—11,711

The results of wrecks to the vessels were :

	Ships.	Strs.		Ships.	Strs.
Total loss.....	2,119	115	Minor damage.....	4,062	354
Constructive loss.....	163	7	Raised after sinking.....	44	8
Great damage.....	1,196	99	Not damaged, or results unknown	1,874	446

The results to cargoes, so far as reported, were :

	Ships.	Strs.		Ships.	Strs.
All lost.....	1,875	71	Heated.....	20	..
Part lost.....	639	50	Shifted.....	111	6
All saved.....	62	5	Otherwise damaged.....	218	38
Forwarded .....	74	12			

The number of salvage cases were : ships, 1,264, and steamers, 116. So far as reported, the lives lost were 2,644.

An elaborate tabular analysis of the wrecks is also given, divided into thirty-one geographical sections, with the remark that "the arrangement followed is that of voyages between the ports within the several sections and the United Kingdom and Continent of Europe (between Bordeaux and Hamburg, both included), and does not necessarily indicate the locality of the casualty." With this explanation we subjoin two of the sections :

—United States, from Matamoras— (exclusive) to New Brunswick (exclusive).						—British North America.— Cross					
	To	From	Coasters.	ages to.	Cross Voy.	To	From	Coast- ers.	ages to.	Cross	
Total loss.....	Ships ... 32	45	16	41	35	34	63	41	4	2	
	Steamers ...	2	4		1	..	..	..	..	..	
Constructive loss .....	Ships ... 7	5	1	19	4	6	6	6	3		
	Steamers ...	..	..	..	..	..	..	..	..	..	
Great Damage...	Ships ... 47	12	2	50	13	26	8	13	2	13	
	Steamers ... 2	1	..	..	..	..	..	..	..	..	
Minor Damage..	Ships ... 155	69	6	147	62	61	9	17	..	..	
	Steamers ... 23	7	3	1	2	3	1	..	..	..	
Raised after sink- ing.....	Ships ... ..	..	3	..	..	..	..	..	..	..	
	Steamers ... ..	..	..	..	..	..	..	..	..	..	
Not damaged or results unknown	Ships ... 29	37	4	50	15	31	25	16	3	..	
	Steamers ... 14	9	5	3	2	1	..	..	..	..	
Totals.....	Ships ... 270	178	32	307	129	159	112	90	2		
	Steamers ... 39	19	11	4	5	5	10	2			

But, besides the exceedingly valuable series of tables, of which we have here made a very imperfect summary, there is a statement given showing that the whole number of "Casualties" posted in *Lloyd's Loss Book* during each of ten years were :

Year.	Casualties.	Year.	Casualties.
1857	3,218	1862	3,652
1858	3,171	1863	3,906
1859	3,758	1864	3,298
1860	3,539	1865	2,847
1861	3,673	1866	3,370
Total in decade	34,431		
Average in each year	3,443.1		

It will be observed that the casualties in each of the years 1859, 1860, 1861, 1862 and 1863 were much more numerous than in 1866; while those in 1857, 1858, 1864 and 1865 were considerably less. The reports by months show the following results :

	Total for 10 years.	Average per month.		Total for 10 years.	Average per month.
January	4,097	409.7	July	1,638	163.8
February	2,976	297.6	August	1,890	189.0
March	3,009	300.9	September	2,907	290.7
April	2,266	226.6	October	3,831	383.1
May	1,866	186.6	November	4,622	462.2
June	1,688	168.8	December	4,241	424.1

This table shows that the greatest number of reported casualties occurred in the months of November, December and January; the months next in order being October, March and February; the smallest proportion in May, June, July and August. The following analysis shows the ratios :

During November, December and January	12,960	Casualties, or	37%	per cent.
" October, March and February	9,816	"	28%	"
" September and April	4,578	"	13%	"
" May, June, July and August	7,082	"	20%	"
	34,431		100	

The document from Lloyd's, to which we have in this summary way called our readers' attention, will, we expect, be improved in some of its features before the time for another issue comes round; and it will be looked forward to with interest as years impart additional value and importance to it. It may not be out of place here to say that while the geographical arrangement, so far as it goes, is a desirable one, an attempt might be made to tabulate the regions where wrecks and casualties happen. For example, one region might be the Gulf and River St. Lawrence, another the North Atlantic coast, a third the West Indies and Gulf of Mexico, a fourth the channels and coasts of Great Britain, &c., limiting the regions to perhaps less than one-half the number of the geographical sections. The labor incident to this addition to the report would indeed be considerable, but its enhanced value to underwriters, ship owners and shippers would compensate for it all; while the mercantile classes would reap the advantages accruing from the modification of rates of insurance which such an arrangement might eventually lead to.

## COMMERCIAL CHRONICLE AND REVIEW.

Public Debt Statement—Conversion of Seven-thirties—Crops and Business—Rates of Loans—Stock Exchange—Prices of Governments—Amount of Coin—Course of Gold, &c.

No statement of the public debt has been published this month, and it is impossible to say precisely what progress the Secretary has made in his funding operations. Enough is known, however, to lead to the conclusion that they are going forward satisfactorily, and that the aggregate of compound notes and of Seven-thirties has received a considerable diminution. As to the compound notes, the amount maturing is so limited as to be easily manageable, especially in view of the large balance in the Treasury, and of the heavy receipts this month from income tax and internal revenue. Hence, the three per cent. certificates will not need to be issued in exchange for compounds during July nor perhaps in the month of August. As to the Seven-thirties, we have repeatedly shown that it is so much the interest of the holders to convert them into gold-bearing bonds, that we shall not be surprised if, during the next six months, they should disappear from the debt statement almost altogether. Of these notes it will be remembered there are three series. Several weeks ago a controversy arose relative to the first series maturing in August next, of which 130 millions were outstanding at the beginning of May, and about 90 millions on the 1st of June. These notes are dated 15th August, 1864, and call for 7.30 per cent. interest in currency during three years from their date. The controversy originated from the fact that at maturity all the Seven-thirties are convertible at par into Five-twenty gold bearing bonds at the option of the holder. This option gives the notes a value beyond that of an ordinary short security, and causes them to sell in the market at as high a premium as the long gold-bearing Five-twenties themselves. The question raised had regard to the option which confers on these notes their special value. By one party it was contended that the option did not lapse at the date of the maturity of the note, but survived in such a way that at any time after the fifteenth of August the holder could present his note at the Treasury and demand either cash or a bond at his pleasure. One of the inconveniences of this arrangement would have been that capitalists could combine together to hold a large amount of Seven-thirties, should some unforeseen trouble invade the money market, and could demand payment in cash at any time hereafter. Hence the Treasury would be compelled to keep on hand, at great cost to the country for interest, a large amount of currency for the specific purpose of paying off these matured notes. And the speculators who imposed this permanent and mischievous necessity on the Treasury could do it without the sacrifice of the option to demand bonds in exchange for their notes if at any subsequent date such a conversion might be to their interest. Other objections were urged to this view of the case, which were subjected to discussion in Wall street. In view of all the facts we ventured to refute the prevalent opinion, and urged that the holders of August notes would do well to convert them before maturity into bonds. We called attention to the fact that as each Seven thirty note bears on it the express condition that it is convertible "at maturity," the privilege of

conversion must expire by its own limitation on the day the note matures, adding that in a few weeks the Department would probably announce that all August notes not converted at maturity would be treated as the other matured obligations of the Government, would cease to bear interest, and would be paid off at par. This argument has turned out to be correct. For a few days ago the notice was semi-officially issued, and there is now no doubt that such August Seven-thirties as are not presented at the Treasury on or before August 15th, will lose their privilege of conversion, will be paid off in cash, and will consequently fall to par in the market. Of course these regulations do not as yet affect the June and July Seven-thirties which mature next year.

So great are the anomalies which have marked the course of business in all classes of securities, except Government bonds, that during the past six months the remark has been on almost every one's lips that the thinkers have been losers, while the men who have followed the instincts and impulses of the moment have almost invariably grown rich by their operations, or have, at least, avoided serious loss. In the face of an inflated currency, low prices have ruled steadily; and though all descriptions of negotiable securities have confessedly been offering in the market far below their intrinsic worth, still the sellers have been more urgent than the buyers; the speculative feeling seemed extinguished; and all those forces which tend to put up quotations suffered from temporary paralysis. In looking back, it is easy to select and point out some of the causes to which this long reign of depression is due. Business in all departments has been dull and unremunerative; we have had three successive bad harvests; a vast aggregate of money has been lost by people in all parts of the country whose ordinary prudence had unhappily been silenced by the desire to grow suddenly rich, and who have ventured greater or smaller sums in speculative purchases of petroleum, manufacturing, or mining stocks, which soon became either altogether unsaleable, or could only find purchasers at a price scarcely covering the interest on the original purchase money. In our hotels and railroad cars, in our merchant's offices and our banks—wherever we make the inquiry in our chief cities—we find it not difficult to meet with men who have directly or indirectly suffered from the collapse of some of the ten thousand companies with whose prospectuses all parts of the country were inundated two or three years ago. The great reservoir of the public wealth has thus been depleted in two ways. First, through the failure of the crops, by which our people generally have been more or less impoverished; and, secondly, by extravagant speculation, which has reduced multitudes to indigence, and has made almost every one "feel poor," which in its effects on business is as bad as being poor. When to these circumstances we add the pressure of a galling burden of ill-adjusted taxation which our young giant nation has scarcely accustomed its shoulders to bear, and the prodigal habits of domestic expenditure which have grown up and have conferred on us at home and abroad the reputation of being the most extravagant and profuse, as well as the most energetic and enterprising nation in modern Christendom, we shall show some of the reasons, though only a small part of the reasons for that languor that has seized us, and has diffused it cataleptic oppressive torpor over so large a part of our productive energies.

If in the long depression which has prevailed in Wall street, we see reflected

the mercantile and financial gloom under which the whole nation has suffered, shall we not see in the improvement that is now developing itself at the Stock Exchange, a bright promise of good which is to overspread the whole country? It is not without significance that at the London Stock Exchange an improvement is apparent, quite as marked and as unexpected as that we note here. A recent number of the London *Economist* refers to it in the following terms:

The rise in prices during this week and last has puzzled some people, and especially, perhaps, those who have given some attention to philosophical principles, but have not thought the subject quite out. It is generally imagined that some physical quantity—supply, and some other almost mechanical entity, demand, determine price, and rightly understood, we believe, supply and demand *do* determine price, but the sense in which they *do* so requires a very nice and delicate exposition, which we cannot go into here. The material point for the present purpose is this: that the circumstances which act on price are quite as much mental as material. A person who thinks prices are going to rise, he goes and buys, and by his application to buy he raises or tends to raise the price. Just so a person who thinks prices are about to fall is apt to sell, and by so selling he reduces or tends to reduce the price of the article. It cannot be put too strongly that price is an affair of the *nerves* as much as it is an affair of anything.

It is certain, we believe, that the great rise in the shares of the London and Westminster Bank, though caused by a special fact which every one knew, *did* tend to raise the price of everything else. It made people feel more cheerful; it produced the effect of a great splash in a dull pool; it woke up peoples minds, and made them think things would be different.

The great rise in Consols, which has ruined one or two small dealers, is not to be wondered at. They rose more rapidly in value both after 1847 and 1857, than after 1866. And it is more reasonable that in a depression of prices which arises from distrust, those things which are least to be disturbed should sink least at first, and should rise soonest from the common fall.

It is far from our intention to encourage inordinate hopes, or to countenance a speculative reckless spirit among our mercantile classes. The object we have in view will be accomplished if we induce some of our desponding readers to look more hopefully for the turn of the tide, when legitimate risks and mercantile ventures, which would have been rash in the extreme a few months ago may be less perilous, or may be embraced within the limits of prudence and sound business policy.

June has been characterized by a general improvement in the tone of business. The encouraging crop prospects have proved most opportune to the drooping confidence of merchants. It is felt that there is now a solid basis for hopes of improvement, and both in financial and trading circles there is a relaxation of the extreme caution which for months past has paralyzed business. But, with reviving hopes, there is no general disposition to run into excesses. The severe experience of late months have left many with diminished means for carrying on business, while it has sobered all and produced a general disposition to trade prudently.

If we do not misinterpret indications, there is a liability on the part of manufacturers to regard the crop prospects as demanding a large supply of goods. In this city there are large stocks in the hands of commission agents, and reports from New England and Pennsylvania state that heavy stocks are piled upon the factories. Some of the manufacturers are using this glutted condition of the market as an argument with their hands for a reduction in wages, but none ap-

pear to favor the policy of curtailing production. Applications are made at the banks of this city for advances upon manufacturers' stocks to an extent unusual at this season of the year. These, with other facts, would seem to indicate a strong probability that the supply of domestic goods for the Fall trade will be unusually ample. Under these circumstances there would seem to be little reason in the hope entertained among manufacturers that an active business in the Fall will induce an advance in prices.

The course of the money market during the month has not realized the general expectation. The large withdrawals of currency into the treasury, the payment of income tax, and the preparation for the quarterly statements of the banks, made up on the 1st of July, were relied upon as almost certain to induce a decided stringency in the market toward the close of June. On the contrary, the market has steadily increased in ease, and at the close of the month demand loans were 1 per cent. lower than at the opening.

The following are the rates of loans and discounts for the month of June :

RATES OF LOANS AND DISCOUNTS.

	June 7.	June 14.	June 21.	June 28.
Call loans .....	7 @ -	7 @ -	6 @ -	4 @ 6
Loans on Bonds and Mortgage.....	6 @ 7	6 @ 7	6 @ 7	6 @ 7
A 1, endorsed bills, 2 mos.....	7½@ 8	7 @ 8	7 @ 8	6½@ 7
Good endorsed bills, 3 & 4 mos.....	7½@ 9	8 @ 9	8 @ 9	7 @ 8
"      " single names.....	9 @ 10	9 @ 10	9 @ 10	9 @ 10
Lower grades .....	10 @ 15	11 @ 15	11 @ 15	11 @ 15

The expectation of a close money market at the end of the month induced a large "short" interest in the stock market; but the disappointment of the expectation naturally induced a sharp upward movement, based upon the oversold condition of the market. Large amounts of shares changed hands toward the close of the month, and the aggregate transactions for June, at the boards, were run up to 1,822,730 shares, against 1,573,220 for the same period of last year. The total sales at both boards for the first six months of the year amount to 11,339,859 shares, against 12,014,197 for the corresponding period of 1866.

The following table shows the volume of shares sold at the New York Stock Exchange and Open Boards in each month and the half year, since January 1 :

VOLUME OF SHARES SOLD AT THE STOCK BOARDS, JUNE, 1867.

	January.	February.	March.	April.	May.	June.	Since Jan. 1.
Bank shares.....	2,461	1,929	3,425	3,518	4,051	3,584	18,968
Railroad ".....	2,200,510	1,282,251	1,597,017	1,888,205	1,468,041	1,554,112	9,990,136
Coal ".....	24,286	10,369	38,145	8,368	7,515	9,532	98,205
Mining ".....	65,375	29,980	28,502	36,050	38,980	36,268	215,045
Improv'tn ".....	20,344	18,950	41,975	30,000	41,900	31,735	184,704
Telegraph ".....	49,501	33,857	34,615	57,275	42,671	53,173	271,091
Steamship ".....	56,504	91,618	80,561	78,037	61,180	76,656	444,556
Expr'ss &c ".....	4,708	6,409	6,562	12,128	34,411	57,941	122,154
At New York Stock Ex.....	765,359	634,121	672,926	820,157	642,614	611,590	4,146,757
At Open B'd.....	1,658,325	841,242	1,152,876	1,293,424	1,036,085	1,211,150	7,193,102
Total 1867.....	2,423,684	1,475,363	1,825,802	2,113,581	1,678,690	1,822,730	11,339,859
Total 1866.....	2,459,617	1,748,431	1,988,839	1,754,439	2,514,451	1,573,220	12,014,197

Government securities have continued in very active demand from the interior, while moderate shipments of Five-twenties have been made to the interior—the result having been a general advance in prices.

The amount of Government bonds and notes, State and city bonds and company bonds, sold at the Stock Exchange Board in the two first quarters and the month of June, and the total, since January 1, is given in the table which follows:

	1st quarter.	2d quarter.	June.	Since Jan. 1.
United States bonds.....	\$18,702,650	\$40,388,350	\$14,042,750	\$59,091,000
United States notes.....	4,792,490	3,347,600	1,095,350	8,140,080
State and city bonds.....	8,884,100	7,601,650	2,625,930	16,485,750
Company bonds.....	2,216,200	2,387,700	737,000	4,583,900
Total 1867.....	\$34,595,490	\$53,705,300	\$18,521,050	\$88,300,730
Total 1866.....	32,600,540	36,414,350	12,078,750	69,014,890

The following are the closing quotations at the regular board on Friday of each of the last seven weeks.

	May 17.	May 24.	May 31.	June 7.	June 14.	June 21.	June 28.
Cumberland Coal.....	30	...	...	...	80 $\frac{1}{2}$	...	88 $\frac{1}{2}$
Quicksilver.....	27	25	25	25	28	27 $\frac{1}{2}$	81 $\frac{1}{2}$
Canton Co.....	41 $\frac{1}{4}$	43	...	...	...	...	47
Mariposa prof.....	17 $\frac{1}{2}$	20 $\frac{1}{2}$	20 $\frac{1}{2}$	20	19 $\frac{1}{2}$	21 $\frac{1}{2}$	21 $\frac{1}{2}$
New York Central.....	97 $\frac{1}{2}$	97	98 $\frac{1}{2}$	100 $\frac{1}{2}$	101 $\frac{1}{2}$	102 $\frac{1}{2}$	104 $\frac{1}{2}$
Erie.....	69 $\frac{1}{2}$	58 $\frac{1}{2}$	58 $\frac{1}{2}$	60 $\frac{1}{2}$	60 $\frac{1}{2}$	59 $\frac{1}{2}$	66 $\frac{1}{2}$
Hudson River.....	100 $\frac{1}{2}$	100	102	109 $\frac{1}{2}$	108 $\frac{1}{2}$	108 $\frac{1}{2}$	109 $\frac{1}{2}$
Reading.....	103	102 $\frac{1}{2}$	103 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$
Michigan Southern.....	67 $\frac{1}{2}$	66 $\frac{1}{2}$	68 $\frac{1}{2}$	68 $\frac{1}{2}$	68 $\frac{1}{2}$	70 $\frac{1}{2}$	78 $\frac{1}{2}$
Michigan Central.....	109 $\frac{1}{2}$	...	...	111	113	x.d107	110 $\frac{1}{2}$
Cleveland and Pittsburg.....	73 $\frac{1}{2}$	71 $\frac{1}{2}$	75	76 $\frac{1}{2}$	76 $\frac{1}{2}$	77 $\frac{1}{2}$	84 $\frac{1}{2}$
Cleveland and Toledo.....	113	...	...	119	118	120 $\frac{1}{2}$	120
Northwestern.....	84 $\frac{1}{2}$	81 $\frac{1}{2}$	83 $\frac{1}{2}$	84 $\frac{1}{2}$	84 $\frac{1}{2}$	85 $\frac{1}{2}$	82 $\frac{1}{2}$
" preferred.....	59 $\frac{1}{2}$	56 $\frac{1}{2}$	57 $\frac{1}{2}$	58 $\frac{1}{2}$	59 $\frac{1}{2}$	59 $\frac{1}{2}$	65 $\frac{1}{2}$
Rock Island.....	88 $\frac{1}{2}$	87 $\frac{1}{2}$	87 $\frac{1}{2}$	88 $\frac{1}{2}$	89 $\frac{1}{2}$	90 $\frac{1}{2}$	95 $\frac{1}{2}$
Fort Wayne.....	96 $\frac{1}{2}$	95	96 $\frac{1}{2}$	99	97 $\frac{1}{2}$	98	103 $\frac{1}{2}$
Illinois Central.....	114 $\frac{1}{2}$	115	115 $\frac{1}{2}$	119 $\frac{1}{2}$	...	120 $\frac{1}{2}$	121 $\frac{1}{2}$

The daily closing prices of the principal government securities are shown in the following statement:

PRICES OF GOVERNMENT SECURITIES AT NEW YORK, JUNE, 1867.

Day of month.	6's, 1881.—		6's, (5-20 yrs.) Coupon—		5's, 18-40 yrs.		7-30 <sup>th</sup>
	Coup.	Reg.	1862.	1864.	1865.	new.	
Saturday 1.....	111 $\frac{1}{2}$	...	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Sunday 2.....	27	25	25	25	25	28	27 $\frac{1}{2}$
Monday 3.....	113	107 $\frac{1}{2}$	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Tuesday 4.....	112 $\frac{1}{2}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Wednesday 5.....	112 $\frac{1}{2}$	108	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Thursday 6.....	...	108	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Friday 7.....	112	...	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Saturday 8.....	112	108	109 $\frac{1}{2}$	106	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Sunday 9.....	...	...	...	...	...	...	...
Monday 10.....	112 $\frac{1}{2}$	108 $\frac{1}{2}$	107 $\frac{1}{2}$	106 $\frac{1}{2}$	106 $\frac{1}{2}$	109	99 $\frac{1}{2}$
Tuesday 11.....	...	...	110	106 $\frac{1}{2}$	108 $\frac{1}{2}$	109 $\frac{1}{2}$	99 $\frac{1}{2}$
Wednesday 12.....	112 $\frac{1}{2}$	...	110	106 $\frac{1}{2}$	107	109 $\frac{1}{2}$	100
Thursday 13.....	112 $\frac{1}{2}$	...	110	107	107	109 $\frac{1}{2}$	100 $\frac{1}{2}$
Friday 14.....	112 $\frac{1}{2}$	...	110 $\frac{1}{2}$	106 $\frac{1}{2}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$	106 $\frac{1}{2}$
Saturday 15.....	...	108 $\frac{1}{2}$	110 $\frac{1}{2}$	106 $\frac{1}{2}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$	106 $\frac{1}{2}$
Sunday 16.....	...	...	...	...	...	...	...
Monday 17.....	...	...	110 $\frac{1}{2}$	107	107 $\frac{1}{2}$	109 $\frac{1}{2}$	106 $\frac{1}{2}$
Tuesday 18.....	...	...	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$	106 $\frac{1}{2}$
Wednesday 19.....	...	...	110 $\frac{1}{2}$	107	107 $\frac{1}{2}$	109 $\frac{1}{2}$	108 $\frac{1}{2}$
Thursday 20.....	...	...	110 $\frac{1}{2}$	106 $\frac{1}{2}$	106 $\frac{1}{2}$	109 $\frac{1}{2}$	100
Friday 21.....	...	...	110 $\frac{1}{2}$	106 $\frac{1}{2}$	107	109 $\frac{1}{2}$	100
Saturday 22.....	112 $\frac{1}{2}$	...	110 $\frac{1}{2}$	107	...	109 $\frac{1}{2}$	100
Sunday 23.....	...	...	...	...	...	...	...
Monday 24.....	113	...	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	...
Tuesday 25.....	113 $\frac{1}{2}$	...	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	100 $\frac{1}{2}$
Wednesday 26.....	113 $\frac{1}{2}$	109 $\frac{1}{2}$	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	100 $\frac{1}{2}$
Thursday 27.....	113 $\frac{1}{2}$	108 $\frac{1}{2}$	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	100 $\frac{1}{2}$
Friday 28.....	...	108 $\frac{1}{2}$	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	100 $\frac{1}{2}$
Saturday 29.....	...	...	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	100 $\frac{1}{2}$
Sunday 30.....	...	...	...	...	...	...	...
First.....	111 $\frac{1}{2}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Lowest.....	111 $\frac{1}{2}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$	105 $\frac{1}{2}$	106 $\frac{1}{2}$	108 $\frac{1}{2}$	99 $\frac{1}{2}$
Highest.....	113 $\frac{1}{2}$	109	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	100 $\frac{1}{2}$
Range.....	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$
Latest.....	113 $\frac{1}{2}$	108 $\frac{1}{2}$	110 $\frac{1}{2}$	107 $\frac{1}{2}$	107 $\frac{1}{2}$	110 $\frac{1}{2}$	106 $\frac{1}{2}$

The quotations for three-years compound interest notes on each Thursday of the month have been as shown in the following statement:

PRICES OF COMPOUND INTEREST NOTES AT NEW YORK, JUNE, 1867.

Issue of	June 6.	June 13.	June 20.	June 27.
June, 1864.....	119 1/2 @ 119 1/2	119 1/2 @ 119 1/2	119 .....	119 .....
July, 1864.....	118 1/2 @ 119 1/2	119 .....	119 .....	119 .....
August, 1864.....	119 1/2 @ 118 1/2	118 1/2 @ 118 1/2	118 1/2 @ 119 1/2	119 1/2 @ 119 1/2
October, 1864.....	117 1/2 @ 118	117 1/2 @ 118	117 1/2 @ 118	117 1/2 @ 118
December, 1864.....	116 1/2 @ 117	117 .....	117 .....	117 .....
May, 1865.....	116 .....	116 1/2 @ 116 1/2	116 1/2 @ 116 1/2	116 1/2 @ 116 1/2
August, 1865.....	115 .....	115 1/2 @ 115 1/2	115 1/2 @ 115 1/2	115 1/2 @ 115 1/2
September, 1865.....	114 1/2 @ 115 1/2	114 1/2 @ 115 1/2	115 .....	115 .....
October, 1865.....	114 1/2 @ 114 1/2	114 1/2 @ 114 1/2	114 1/2 @ 115	114 1/2 @ 114 1/2

The first series of figures represents the buying and the last the selling price, at first-class brokers' offices.

At London the price of United States bonds has ranged between 72½ and 73½ the quotations not having appreciably yielded under an advance of two points in the premium on gold. The reduction in the Bank of England rate of discount has facilitated the carrying of bonds by the London dealers, which doubtless has been one cause of the firmness of prices.

The closing prices of Consols and certain American Securities at London, on each day of the month of June are shown in the following statement:

COURSE OF CONSOLS AND AMERICAN SECURITIES AT LONDON—JUNE, 1867

Date.	Cons for mon.	American securities.				Date.	Cons for mon.	American securities.			
		U. S.	Ill.C.	Erie sh's.	A. & G.W.			U.S.	Ill.C.	Erie sh's.	A. & G.W.
Sat'day. 1.....	96	73 1/4	78 1/4	40 1/4	....	Wedne. 19.....	94 1/2	73 1/4	79	39 1/2	25 1/2
Sunday. 2.....		....	....	....	....	Thurs. 20.....	94 1/2	73	79	39	26
Monday 3.....	94 1/2	73	78 1/4	40 1/4	....	Friday. 21.....	94 1/2	73	79	38 1/2	25 1/2
Tues. 4.....	94 1/2	73	78 1/4	40 1/4	....	Sat'day. 22.....	94 1/2	73	79	39	25 1/2
Wedne. 5.....	94 1/2	73	78 1/4	40	....	Sunday. 23.....	....	....	....	....	....
Thurs. 6.....	94 1/2	73	78	39 1/4	....	Monday. 24.....	94	73	79	39	25 1/2
Friday. 7.....	94 1/2	73	78 1/4	39 1/4	....	Tues. 25.....	94 1/2	73	79 1/2	39 1/2	25 1/2
Sat'day. 8.....	94	73	78 1/4	40	....	Wedne. 26.....	94 1/2	73	79 1/2	40 1/2	25 1/2
Sunday. 9.....	....	....	....	....	....	Thurs. 27.....	94 1/2	73	79 1/2	41 1/2	21
Monday 10.....	....	(Holl day.)	....	....	....	Friday. 28.....	94 1/2	73	79 1/2	41 1/2	21
Tues. 11.....	94 1/2	73	78 1/4	40 1/4	....	Sat'day. 29.....	94 1/2	72 1/2	79 1/2	43	24 1/2
Wedne. 12.....	94 1/2	73	78 1/4	40 1/4	....	Sunday. 30.....	....	....	....	....	....
Thurs. 13.....	94 1/2	73	79 1/4	40 1/4	....	Highest.....	96	73 1/4	79 1/2	43	26
Friday. 14.....	94 1/2	73 1/4	79 1/4	40 1/4	....	Lowest.....	94	73	78 1/4	38 1/2	24 1/2
Sat'day. 15.....	94 1/2	73 1/4	79 1/4	40 1/4	25 1/2	Range.....	2	1 1/4	1 1/4	4 1/2	1 1/2
Sunday. 16.....	....	....	....	....	Lo. s. J. 1.....	90	67 1/2	73 1/2	35 1/2	24 1/2	
Monday. 17.....	94 1/2	73 1/4	79	40	26	Hi. s. J. 1.....	96	75 1/2	82 1/2	46 1/2	26
Tues. 18.....	94 1/2	73 1/4	79	40	26						

The lowest and highest quotations for United States 6's (5-20 years) of 1862 at Paris and Frankfort, in the weeks ending Thursday, have been as follows:

	June 6.	June 13.	June 20.	June 27.
Frankfort	77 1/2 @ 77 1/2	77 1/2 @ 77 1/2	77 1/2 @ 78	77 1/2 @ 77 1/2

The course of the gold premium has been upward. The advance has followed the reopening of the breach between the President and Congress on the question of reconstruction, and the assembling in Congress in special session. At the same time, the expectation of a short supply upon the market before the next large payment of coupons, in November, has tended to strengthen the premium. The price has ranged during the month between 136*1* and 138*4*.

The import and export of coin and bullion at the port of New York for June and the two first quarters of the current year, and since Jan. 1, have been as shown in the following statement:

## IMPORT AND EXPORT OF COIN AND BULLION.

	First Quarter.	Second Quarter.	Month of June.	Since Jan. 1.
Receipts from California.....	\$6,109,861	\$6,899,555	\$2,566,773	\$13,009,416
Imports from foreign ports.....	409,077	1,145,912	497,477	1,554,989
Total receipts.....	\$6,518,938	\$8,045,467	\$3,066,250	\$14,564,405
Exports to foreign ports.....	6,566,958	17,652,966	6,348,529	24,219,934
Excess of exports.....	\$48,020	\$9,607,493	\$3,282,279	\$9,655,519

The following statement shows the amount of receipts and exports in June and since January 1, for the last seven years:

	California Receipts—		Foreign Imports—		Foreign Exports—	
	June.	Since Jan. 1.	June.	Since Jan. 1.	June.	Since Jan. 1.
1867.....	\$2,566,773	\$13,009,416	\$497,477	\$1,554,989	\$6,348,529	\$24,219,934
1866.....	1,842,271	16,420,347	94,549	1,160,186	15,580,956	45,792,450
1865.....	750,469	8,942,322	236,033	1,052,023	5,199,472	17,906,759
1864.....	723,951	5,822,571	146,731	1,427,014	6,583,109	29,152,121
1863.....	800,178	7,296,913	109,997	853,768	1,367,774	20,631,963
1862.....	1,911,099	11,982,067	61,023	512,465	9,367,614	27,976,357
1861.....	2,012,062	19,120,057	5,387,153	25,909,668	344,242	3,249,488

The general movement of coin and bullion at this port during the month of June resulted in a deficiency of \$3,327,247 which has been made up from unreported sources. The amount of the deficiency in the reported supply for the first half of the current year is shown at \$35,964,479, the larger part of which came from Government sales. The following formula shows the details for the first two quarters, the month of June and since January 1 to June 30:

## GENERAL MOVEMENT OF COIN AND BULLION.

	1st quarter.	2d quarter.	June.	Since Jan. 1.
In banks at commencement.....	\$13,185,222	\$8,522,600	\$14,617,060	\$13,185,222
Receipts from California.....	6,109,861	6,899,555	2,566,773	\$13,009,416
Imports from foreign countries.....	409,077	1,145,912	497,477	1,554,989
Coin interest paid by U. States.....	10,638,368	17,793,025	1,287,052	28,631,323
Total reported supply.....	\$30,542,463	\$34,361,101	\$18,920,392	\$56,330,955
Export to foreign countries.....	\$6,566,958	17,652,966	\$6,348,529	\$24,219,934
Customs duties.....	33,170,628	27,185,886	8,040,114	60,356,514
Total withdrawn.....	\$39,737,586	\$44,888,852	\$14,388,643	\$44,576,438
Excess of reported supply.....	\$.....	\$.....	\$4,531,749	\$...
Excess of withdrawals.....	9,195,123	10,477,751	7,768,996	9,195,483
Specie in banks at close.....	8,522,069	7,768,996	7,768,996	7,768,996
Derived from unreported sources.....	\$17,717,739	\$18,246,747	\$8,237,247	\$35,964,479

The statement which follows shows the daily range of American gold coin as quoted at the Gold Room:

## COURSE OF GOLD AT NEW YORK, JUNE, 1867.

Date.	Open'g	Lowest	High'g	Closing	Date.	Open'g	Lowest	High'g	Closing
Saturday..... 1.....	136 1/2	136 1/2	136 1/2	136 1/2	Friday..... 21.....	137 1/2	137 1/2	137 1/2	137 1/2
Sunday..... 2.....	137 1/2	136 1/2	137 1/2	137 1/2	Saturday..... 22.....	138 1/2	137 1/2	138 1/2	137 1/2
Monday..... 3.....	136 1/2	136 1/2	137 1/2	137 1/2	Sunday..... 23.....	138 1/2	138 1/2	138 1/2	137 1/2
Tuesday..... 4.....	137	136 1/2	137 1/2	136 1/2	Monday..... 24.....	138 1/2	138 1/2	138 1/2	138 1/2
Wednesday..... 5.....	136 1/2	136 1/2	136 1/2	136 1/2	Tuesday..... 25.....	138 1/2	138 1/2	138 1/2	138 1/2
Thursday..... 6.....	136 1/2	136 1/2	136 1/2	136 1/2	Wednesday..... 26.....	138 1/2	138 1/2	138 1/2	138 1/2
Friday..... 7.....	136 1/2	136 1/2	136 1/2	136 1/2	Thursday..... 27.....	138 1/2	137 1/2	138 1/2	138 1/2
Saturday..... 8.....	136 1/2	136 1/2	137	136 1/2	Friday..... 28.....	138	137 1/2	138 1/2	138
Sunday..... 9.....	136 1/2	136 1/2	137	136 1/2	Saturday..... 29.....	138 1/2	137 1/2	138 1/2	138 1/2
Monday..... 10.....	136 1/2	136 1/2	137 1/2	137 1/2	Sunday..... 30.....	138 1/2	137 1/2	138 1/2	138 1/2
Tuesday..... 11.....	137 1/2	137 1/2	137 1/2	137 1/2					
Wednesday..... 12.....	137 1/2	137 1/2	137 1/2	137 1/2					
Thursday..... 13.....	137 1/2	137	137 1/2	137 1/2					
Friday..... 14.....	137	137	137 1/2	137 1/2					
Saturday..... 15.....	137	137	137 1/2	137 1/2					
Sunday..... 16.....	137	137	138	137					
Monday..... 17.....	137 1/2	137 1/2	137 1/2	137 1/2					
Tuesday..... 18.....	137 1/2	137 1/2	138 1/2	138 1/2					
Wednesday..... 19.....	137 1/2	137 1/2	138 1/2	138 1/2					
Thursday..... 20.....	137 1/2	137 1/2	137 1/2	137 1/2					
					S'ce Jan. 1, 1867.....	138 1/2	138 1/2	141 1/2	138 1/2

The course of foreign exchange during the month has been very regular. Quotations have ruled at a slight per centage above the specie shipping point, until near the close of the month, when with an improved supply of bills, chiefly from shipments of bonds, rates fell to a point admitting of the export of bullion, but not of specie.

The following shows the course for the month:

COURSE OF FOREIGN EXCHANGE (60 DAYS)—JUNE, 1867.

Days.	London. cents for 54 pence.	Paris. centimes for dollar.	Amsterdam. cents for florin.	Bremen. cents for rinx daler.	Hamburg. cents for M. banco.	Berlin. cents for thaler.
1.	110 @110½	515 @511½	41½@41½	79½@79½	36½@36½	72½@72½
2.						
3.	110 @110½	515 @512½	41½@41½	79½@79½	36½@36½	72½@72½
4.	110 @110½	515 @512½	41½@41½	79½@79½	36½@36½	72½@72½
5.	110 @110½	515 @512½	41½@41½	79½@79½	36½@36½	72½@72½
6.	110 @110½	515 @512½	41½@41½	79½@79½	36½@36½	72½@72½
7.	110 @110½	515 @512½	41½@41½	79½@79½	36½@36½	72½@72½
8.	109½@110½	518½@512½	41½@41½	79½@79½	36½@36½	72½@72½
9.						
10.	110 @110½	515 @512½	41½@41½	79½@79½	36½@36½	72½@72½
11.	110 @110½	515 @512½	41½@41½	79½@79½	36½@36½	72½@72½
12.	109½@110½	518½@512½	41½@41½	79½@79½	36½@36½	72½@72½
13.	110 @110½	512½@511½	41½@41½	79½@79½	36½@36½	72½@72½
14.	110 @110½	518½@511½	41½@41½	79½@79½	36½@36½	72½@72½
15.	109½@110½	515 @511½	40½@41½	78½@79½	36½@36½	72 @72½
16.						
17.	109½@110½	515 @511½	40½@41½	78½@79½	36½@36½	72 @72½
18.	109½@110½	515 @511½	40½@41½	78½@79½	36½@36½	72 @72½
19.	109½@110½	515 @511½	40½@41½	78½@79½	36½@36½	72 @72½
20.	109½@110½	517½@512½	40½@41½	78½@79½	36½@36½	72 @72½
21.	109½@110½	517½@512½	40½@41½	78½@79½	36½@36½	72 @72½
22.	109½@110½	517½@512½	40½@41½	78½@79½	36½@36½	72 @72½
23.						
24.	109½@109½	517½@512½	40½@41½	78½@79	36½@36½	72 @72½
25.	109½@109½	517½@512½	40½@41½	78½@79	36½@36½	72 @72½
26.	109½@109½	517½@512½	40½@41½	78½@79	36½@36½	72 @72½
27.	109½@110½	517½@512½	40½@41½	78½@79	36 @36½	72 @72½
28.	109½@110½	517½@512½	40½@41½	78½@78½	36 @36½	72 @72½
29.	109½@110	517½@512½	40½@41½	78½@78½	36 @36½	72 @72½
30.						
June.	109½@110½	518½@511½	40½@41½	78½@79½	36 @36½	72 @72½
May.	109½@110½	520 @510	40½@41½	78½@80	36 @36½	71½@72½
Apr.	108½@109½	522½@512½	40½@41½	78½@79½	35½@36½	71½@72½
Mar.	108 @109½	525 @515	40½@41½	78 @79½	35½@36½	71½@72½
Feb.	108½@109	523½@515	40½@41½	78½@79½	36 @36½	71½@72½
Jan.	108½@109½	520 @518½	41½@41½	78½@79½	36½@36½	72 @72½
Since Jan 1.	108 @110½	525 @510	40½@41½	78 @80	35½@36½	71½@72½

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

Condition of Banks—Quarterly Statement—Certified Cheques and Comptroller Hurlburd—Bank Returns of New York, Philadelphia and Boston.

The banks of the great central cities appear to be abundantly supplied with available capital. A long period of caution and conservative management has made them strong. For the first time in a year or more the quarterly bank returns to Washington have been made up without any disturbance of the money market, and we have no doubt from the investigations we have been able to make both here and in other financial centres, that the reports when published a few weeks hence will prove that these institutions generally are more healthy and sound and therefore more useful to the country than in any previous period since

the National Currency Act was first passed by Congress. It would have been Utopian to have expected that sixteen or seventeen hundred banks, many of them entirely new, could in three or four years be brought into activity without the intrusion of a few unworthy institutions, whose weakness and instability would unfit them for union with the other members of the sisterhood of banks. But it was to be expected, and it is in fact realized, that the exposure of the rotten parts of the financial edifice should be speedy, and that the excision of the unsound banks should be effected without compromising the safety or disturbing the integrity of the vast national organization as a whole. Among the numerous appliances which have been brought into play for the purposes referred to, it is impossible to overestimate the influence of the press. Publicity of the condition of the banks must ever be regarded as one indispensable condition for annihilating or keeping in check those forces which lead to unsound and dangerous business. The visits of the Government examiners, and the reports given monthly and quarterly to the department at Washington, derive their chief value from this; that they expose the interior of the banks to publicity, and thus afford means of verifying their accounts and testing their soundness, in the interest and for the information of their stockholders, of their dealers, and of the public generally, whose fortunes and business efficiency are so intimately associated with every movement of these institutions. We need not urge the obvious fact that the rendering of their official quarterly reports ought not to impose on the banks the necessity of modifying their usual business. We regard it, therefore, as a good sign, and a proof of the soundness of the banks, that the perturbations and irregularities which have been complained of in the money market as attendant on previous quarterly reports have in the present case been avoided, while the reports themselves show unusually satisfactory results. Were our banks, like those of England eighteen months ago, unduly expanded, or were they now filled, as in 1864, with securities of doubtful value, we should not dare to conclude so hopefully as to the future. But in the presence of so many undoubted facts indicative of strength, while the bank vaults are filled with Government bonds and other securities of undoubted soundness and appreciating value, we have little hesitation in putting on record the opinion that, notwithstanding the failure of a few banks in New Orleans and elsewhere, the National Banks generally are in such a condition that in the absence of any unforeseen influences arising out of Congressional interference, a considerable period of exemption from the ordinary causes of monetary stringency may probably be enjoyed, which, if Providence should grant us an abundant harvest, may be productive of the happiest results on the trade, commerce, wealth and general prospects of the country.

There has been some discussion the past month in this city with regard to certified cheques, and the probable action of Comptroller Hulburd with regard to them. The publication by the daily press of his letter, however, shows that no power is claimed by that officer to dictate to the banks, to interfere with their long established principles of management, or to disturb any of those safeguards and economical expedients which are sanctioned by experience and useful in business. Yet, while he does not claim under the law any right to forbid the certification of cheques he does claim the right to correspond in a semi-official way

on the reports of the examiners, which are periodically made to him relative to every bank in the country. We hope, indeed, to hear more from these reports, and as the Comptroller has now got his office and his methods well organized, the public expect to see evidence that the examiners visit every one of the banks however remote at frequent intervals, and that wherever he finds anything which rightly or wrongly seems irregular, he avails himself of the undoubted right to ask for explanations. What has been complained of, and what the public generally are not satisfied with, is rather the secrecy with which most of the investigations of the Currency Bureau with the banks are enveloped. Here in New York, the heart and brain of the whole banking organism, we ought to know promptly from official publication many facts of which the Bureau is cognizant relative to broken and other banks all over the country, which now reach us, and through us the whole nation, in a very slow, round-about, and unsatisfactory manner. The information the Bank Department obtains is reported there by law not for the private information of the officers of that Bureau, but for the public, and the public ought to be put in possession of the information without delay.

The letter of the Comptroller on certified cheques referred to above was addressed to Mr. Haight, the President of the Bank of the Commonwealth, in this city, and has elicited a reply which exhibits the reasons why the banks of New York have adopted the practice of certifying the cheques of their dealers, and claims that in this city the practice is safe, necessary and superior to any plan that has ever been substituted or suggested instead of it. On the usefulness of the custom Mr. Haight says that "certifying checks in excess of actual balances at the moment the certification is made, is a practice that has grown to be a necessity in the transaction of business here. The practice is much older than the national banking system and than the New York State system, on which that was modeled. It is the outgrowth and result of the tendency of the business mind to overcome the hindrances that a rigid adherence to the original cast iron system of banking presented to the increasing growth and extent of business in this city. And although the large transactions of bankers and brokers occasions the practice to be spoken of as employed for them alone, such is not the fact; for there is no merchant of credit and responsibility, whose matured notes or cheques for such reasonable sums as he might give them, being presented and refused payment at *one o'clock*, because his deposits were not usually made till *two*, would not evoke a displeasure that would be speedily manifested in a closing of the account." To do away with the necessity for the certifying of cheques two expedients have been suggested; first, the establishment of a Stock Exchange Clearing House, and secondly, the use of cheques without the security and guarantee given by certification. The latter of these suggestions Mr. Haight discusses as follows :

I beg to ask (so long as cheques are, and of necessity *must* be, used in the transfer of balances), how safer than the present system it would be for banks to receive in deposit cheques on each other *not* certified, against which they become liable to pay their own customers' cheques, than to discriminate in certifying for them, and to require in turn, as is done, that their deposits shall consist of certified cheques on other banks? In the one case the bank trusts its own customer, of whose character, capital

and business capacity it may be presumed to be reasonably able to inform itself; in the other, it of necessity trusts scores of customers of *other* banks, of whom it can hardly be presumed to know much. Or in one case it may have certified its customers' cheques to the extent of \$10,000,000, and have received from them on deposit, certified cheques to the amount of \$11,000,000 with perfect safety on both sides, and in the other it *may not have certified a dollar*, and having on deposit \$11,000,000 of cheques on other banks, *not certified*, rendered itself liable to pay that amount to any number of brokers holding its customers' cheques, who may require the banks to pay them rather than hold their cheques till after the day's clearings. Such requirement on the part of broker, banker or merchant would hardly be deemed "im-pudent"—a refusal of the bank to pay *might* be deemed so. But would paying under such circumstances be absolutely safe? Would it not have been safer to have certified at first and secured certified cheques from them?

But you say that we would probably reject without hesitation a proposition to certify in *this* way for our depositors without discrimination. To which I reply not only *probably*, but most *certainly*. It is just this ability to discriminate, this exercise of judgment, discretion, tact and experience that is presumed to give value to the services of a bank's officers. And if in the exercise of these qualities a discriminating policy is adopted that results in a mutual advantage to bank and depositor alike, who can have just cause for complaint? For it by no means follows that the banker, broker, or merchant is alone benefitted by these transactions. The resulting balance inures most substantially to the benefit of the bank, enabling it to loan money far in excess of its capital for the substantial profit of its stockholders. As, then, the depositor trusts the bank, why should not the bank trust its depositors? In these transactions the depositor is trusted for but for an hour or two—the bank is trusted for days. It ought, therefore to be assumed that *both* act with discrimination, and that in the exercise of this discrimination the safety of both may be reasonably assured. Brokers alone do *not* claim this indulgence—it is extended alike to bankers and merchants, in different degrees, with such reasonable discrimination as bank officers are presumed to exercise—and, in this city at least, it is not an indulgence that is by any means extraordinary. You speak of it as an "abuse of practice." Like all other practices, not wrong in themselves, it may be abused; but I am not by any means, prepared to admit that it is generally abused, or that its abuses have not been rare and exceptional.

As to the plan of a Stock Exchange Clearing House, the letter before us offers no observations. The Comptroller, we believe, is of opinion that the certification of cheques might be dispensed with, by the establishment of a clearing institution to fulfil to the dealers in stocks similar functions to those for which the gold dealers depend on the new Gold Exchange Bank. We believe that the general opinion in Wall street is not favorable to the scheme, the merits of which have never, in any country, been submitted to the test of experience.

Below we give the returns of the Banks of the three cities since Jan. 1 :

NEW YORK CITY BANK RETURNS.						
Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs
January 5 . . .	\$257,852,460	12,794,892	32,762,779	202,533,564	65,026,121	486,967,787
January 12 . . .	258,935,488	14,613,477	32,525,193	202,517,608	63,246,370	605,132,006
January 19 . . .	255,032,223	15,365,207	32,854,928	201,500,115	63,235,386	520,040,028
January 26 . . .	251,674,801	16,014,007	32,957,198	197,952,076	63,426,569	568,822,84
February 2 . . .	251,264,355	16,332,984	32,995,347	200,511,596	65,944,541	512,407,258
February 9 . . .	250,268,825	16,157,257	32,777,00	198,241,832	67,628,992	508,825,532
Febr'u'ry 16 . . .	253,131,328	14,792,626	32,956,809	196,072,292	64,642,940	455,833,829
Febr'u'ry 23 . . .	257,823,994	13,513,456	33,006,141	198,420,347	63,153,895	443,574,086
March 2 . . .	261,156,486	11,579,881	33,294,433	198,018,914	63,014,195	465,531,549
March 9 . . .	262,141,458	10,868,182	33,409,811	200,238,527	64,523,440	544,173,256
March 16 . . .	263,072,972	9,968,722	33,496,683	197,958,504	62,813,039	496,558,19
March 23 . . .	259,400,315	9,143,913	33,519,401	194,375,615	60,904,953	472,023,18
March 30 . . .	255,82,364	8,532,6 9	33,669,195	188,480,260	62,450,811	459,580,602
April 6 . . .	254,470,027	8,138,813	33,774,573	183,861,369	59,021,775	531,835,184
April 13 . . .	250,102,178	8,856,299	33,702,047	182,861,236	60,202,515	525,933,462
April 20 . . .	247,561,781	7,629,535	33,648,571	184,090,256	64,096,916	447,814,375
April 27 . . .	247,737,381	7,404,304	33,601,285	187,674,341	67,920,351	446,484,422
May 4 . . .	250,871,553	9,902,177	33,571,747	195,721,072	70,587,407	559,860,118

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs
May 11....	253,682,529	14,959,500	33,595,869	200,342,832	67,998,639	524,819,769
May 18....	237,961,874	15,567,252	33,632,301	201,436,834	63,828,501	503,675,793
May 25....	256,091,805	14,083,667	33,697,232	198,673,345	60,562,440	481,732,622
June 1....	252,791,514	14,617,070	33,747,089	190,386,143	58,459,697	442,675,586
June 8....	250,477,293	15,699,038	33,719,088	184,730,335	55,923,17	461,734,316
June 15....	246,228,465	12,656,389	33,707,199	180,317,763	57,924,294	460,968,602
June 22....	243,640,477	9,899,585	33,633,171	179,477,170	62,816,192	442,440,804
June 29....	242,547,954	7,768,996	33,542,560	186,318,257	70,174,755	493,944,356

## PHILADELPHIA BANK RETURNS.

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.
January 5....	\$20,209,064	52,312,317	908,663	10,558,820	41,566,327
January 12....	20,006,355	52,525,491	902,320	10,530,577	41,028,421
January 19....	19,448,096	53,454,307	877,545	10,381,595	30,048,645
January 26....	19,363,274	52,163,473	880,552	10,334,683	39,001,779
February 2....	19,269,128	55,351,120	871,564	10,430,8-8	39,592,712
February 9....	19,459,250	53,384,329	873,614	10,449,982	39,811,595
Februy 16....	18,892,747	52,573,130	867,110	10,522,972	40,050,717
Februy 23....	17,887,598	52,294,721	841,233	10,556,434	38,646,013
March 2....	18,150,657	51,979,173	816,843	10,5 1,600	39,367,398
March 9....	17,521,705	51,851,463	832,655	10,572,068	37,314,672
March 16....	16,955,6 3	50,5 8,204	858,022	10,580,911	3 8,826,001
March 23....	16,071,780	50,572,490	807,4 3	10,611,987	34,5 1,645
March 30....	15,856,948	50,880,306	602,148	10,631,532	34,150,285
April 6....	15,882,745	50,998,231	64,719	10,651,615	38,796,595
April 13....	16,188,407	51,233,776	546,625	10,645,367	34,827,683
April 20....	16,582,296	51,611,44	485,535	10,647,294	35,820,580
April 27....	16,737,901	51,890,939	392,817	10,688,021	36,284,870
May 4....	17,196,558	58,054,267	386,053	10,639,695	37,371,064
May 11....	17,278,919	53,474,388	408,702	10,627,953	38,172,169
May 18....	16,770,491	53,826,320	402,978	10,630,831	38,230,833
May 25....	16,019,180	53,536,170	369,183	10,635,520	37,778,788
June 1....	16,881,109	52,747,308	384,393	10,687,432	37,332,144
June 8....	16,880,720	53,158,194	346,615	10,642,920	37,252,614
June 15....	16,300,010	53,192,049	338,261	10,645,293	37,174,269
June 22....	15,964,424	52,968,441	373,308	10,642,224	37,332,979
June 29....	16,105,61	52,588,963	365,187	10,641,311	36,616,847

## BOSTON BANK RETURNS.

(Capital Jan. 1, 1866, \$41,900,000.)

	Loans.	Specie.	Legal Tenders.	Deposits.	Circulation	
					National.	State.
January 7....	\$97,009,242	1,183,451	17,033,387	40,824,618	24,580,367	312,664
January 14....	98,481,778	1,334,300	16,829,45	40,246,216	24,997,446	311,749
January 21....	95,298,932	1,078,160	16,598,.99	38,679,604	24,275,162	301,911
January 28....	97,891,329	1,058,329	16,816,481	39,219,241	24,716,597	302,298
February 4....	97,742,461	956,569	16,394,604	39,708,053	24,691,075	306,014
Februy 11....	97,264,162	873,396	1, 102,479	39,474,329	24,656,663	305,603
Februy 18....	96,949,473	929,940	15,398,388	38,900,5-0	24,765,420	305,603
Februy 25....	95,33,900	779,402	15,741,046	37,993,963	24,955,605	303,229
March 4....	95,050,737	958,857	18,9-8,103	38,316,573	24,675,767	301,430
March 11....	92,078,975	695,447	15,719,479	38,712,052	24,346,681	189,5 8
March 18....	93,156,456	568,94	16,270,979	36,751,733	24,800,523	299,133
March 25....	92,661,060	516,184	16,557,905	36,751,723	24,728,722	299,091
April 1....	91,723,847	435,113	17,12,493	37,056,388	24,843,376	206,025
April 8....	91,679,549	456,751	16,860,418	37,258,775	24,851,522	296,011
April 15....	91,712,414	376,343	16,815,355	37,218,525	24,838,819	287,205
April 22....	92,472,815	843,712	16,549,598	38,207,548	24,852,200	286,701
April 29....	92,358,923	320,854	16,926,564	37,837,092	24,811,437	284,982
May 6....	92,671,149	5-9,378	16,571,139	38,721,769	24,784,332	288,806
May 13....	92,428,114	517,597	16,552,421	38,504,761	24,805,992	283,514
May 20....	92,633,587	507,806	16,499,319	37,874,842	24,835,469	283,491
May 27....	92,228,677	441,072	16,882,361	37,132,051	24,805,860	290,961
June 3....	92,694,925	571,526	17,173,901	37,096,894	24,725,794	279,275
June 10....	93,426,167	436,767	16,707,554	36,038,716	24,804,153	268,768
June 17....	93,725,423	511,095	15,719,795	36,029,938	24,771,773	271,048
June 24....	92,951,169	470,544	15,755,396	36,521,149	24,768,947	267,294

## COMMERCE OF SAN FRANCISCO.

The returns for the quarter ending March 31, are summed up in the annexed statements:

The tonnage arrivals (whalers not included) amounted to—

From—	1864. Tons.	1865. Tons.	1866. Tons.	1867. Tons.
Domestic Atlantic ports.....	19,861	28,004	25,381	34,461
Domestic Pacific ports.....	64,279	58,988	66,057	77,840
Foreign ports.....	66,101	73,182	84,839	69,984

Of the arrivals from foreign ports, a large portion is composed of steam tonnage, employed by regular lines plying up and down the Pacific coast, and is as follows:

From	1864. Tons.	1865. Tons.	1866. Tons.	1867. Tons.
From Panama.....	25,234	25,688	26,418	23,415
From San Juan del Sur.....	.....	4,744	4,393	6,073
From Northern Mexico.....	2,443	2,192	5,985	4,103
From British Columbia.....	10,081	8,991	2,350	2,040
Totals .....	37,708	41,575	39,053	35,632

The receipts of merchandise via the Isthmus of Panama were as follows:

Tons.....	1865.	1866.	1867.
.....	6,738	7,080	8,126

The amount of freights paid on merchandise imports has been as follows:

From—	1865.	1866.	1867.
Domestic Atlantic ports.....	\$1,052,093	\$866,014	\$802,445
Panama, per steamers.....	409,451	45,376	511,486
Principal foreign ports.....	406,834	308,972	311,553
Other foreign ports.....	47,274	158,161	63,202
Total freights on cargoes.....	\$2,035,652	\$1,718,523	\$1,688,776

The merchandise exports show an increase over those of last year. The figures are as follows:

To	1865.	1866.	1867.
New York, &c .....	\$983,611	\$916,954	\$1,315,17
Great Britain.....	23,928	261,225	1,373,760
Mexico.....	576,238	435,584	692,287
South America.....	104,758	59,509	58,571
Hawaiian Islands .....	120,341	267,591	128,659
China .....	217,765	302,438	312,934
Australia and New Zealand.....	11,000	1,416,483	18,159
British Columbia.....	354,113	320,950	216,228
Other countries.....	140,618	71,779	179,149
Totals.....	\$2,601,442	\$4,143,123	\$4,734,842

The amount of shipments to domestic Atlantic ports, as indicated in the above table, represents their value both by sailing vessels and steamers, via Panama, and New York. The amount of shipments forwarded by the steamers of the Pacific Mail Steamship Company, for transit across the Isthmus, were:

Merchandise by Panama transit.....	1865.	1866.	1867.
.....	\$204,349	\$209,119	\$615,887

The amount of treasure exported during the first quarter of the past three years has been as follows:

1865.....	\$11,528,324	1866.....	\$9,525,515	1867.....	\$9,825,305
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[July,

The combined exports of treasure and merchandise are represented by the following :

1865..... \$14,129,176 | 1866..... \$13,668,638 | 1867..... \$14,610,14

Exclusive of transfers by Government, the total exports this year are \$941,599 in excess of a like period in 1866, and \$480,971 more than they were in the first quarter of 1865.

The receipts of treasure from the interior and coastwise, through regular public channels, during the quarter just ended, including coin and bullion, have been as follows :

From California .....	\$5,706,279
Coastwise.....	642,286
Nevada .....	4,199,946
British Columbia, Mexico, etc .....	607,286
Total .....	\$11,945,797

The comparative aggregates for three years are as follows :

1865..... \$13,913,812 | 1866..... \$11,006,692 | 1867..... \$11,945,792

The product of the mines on this coast received through the express companies for the above named period was :

1865..... \$12,160,930 | 1866..... \$9,238,834 | 1867..... \$9,279,18

The figures show a slight increase this year as against last, but in view of the extraordinary severity of the past winter, the comparison is a very favorable one for the present season.

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The following advertisements appear in our advertising pages this month:

### MERCANTILE.

Lillie's Fire & Burglar-Proof Safes—193 B'way  
Fowler & Wells—829 Broadway.  
L. Prang & Co.—Boston and New York—Holiday Publications, etc.  
Howard & Co.—619 Broadway—Diamonds, Watches, Holiday Gifts, etc.  
Mercantile Library—Clinton Hall, Astor Place and Eighth St.  
Ferdinand Korn—191 Fulton St.—Eau de Cologne.

Lewis Audendried & Co.—110 Broadway—Anthracite and Bituminous Coal.  
Kellogg's U. S. Mercantile Register for 1867-8.  
A. B. Sands & Co.—139-141 William St.—Drugs  
J. W. Bradley—97 Chambers St.—Hoop Skirts, Chickering & Sons—632 Broadway—Pianos.

### BANKERS & BROKERS.

Tenth National Bank—336 Broadway.  
Barstow, Eddy & Co.—26 Broad St.  
Lockwood & Co.—94 Broadway.  
Vermilye & Co.—44 Wall St.

Eugene Kelly & Co.—36 Wall St.

DeWitt, Kittle & Co.—88 Wall St.

Simon De Visser—52 Exchange Place.

Duncan, Sherman & Co.—Cor. Pine & Nassau.

L. P. Morton & Co.—30 Broad Street.

Robinson & Ogden—4 Broad St.

Howe & Macy—30 Wall St.

Gilmore, Dunlap & Co.—Cincinnati.

Lewis Johnson & Co., Washington.

Ninth National Bank—363 Broadway.

### INSURANCE.

New York Mutual Insurance Co.—61 William st  
Fidelity Insurance Co.—17 Broadway.  
Marine—Atlantic Mutual Ins. Co.—51 Wall St.  
Mercantile Mut. Ins. Co.—35 Wall St.  
Orient Mutual Ins. Co.  
Sun Mutual Ins. Co.—49 Wall St.  
Great Western Insurance Co.  
Fire—Hope Fire Ins. Co.—92 Broadway.  
Germania Fire Ins. Co.—175 Broadway.  
Aetna Insurance Co.—Hartford.  
U. S. Life Insurance Co.—40 Wall St.